

School Board Journal

Founded March 1891 by WILLIAM GEORGE BRUCE

Volume LVI, Number 6

JUNE, 1918

Subscription, \$2.00 the Year



HELP UNCLE SAM BY BUYING NOW!

WHEN TEACHERS SIT IN JUDGMENT

A Superintendent's Wife

You school superintendents have an interesting way, when you get together, of discussing teachers and asking questions about prospective applicants. I have sat on the side lines and heard many such conversations. Has it ever occurred to you to put these same questions to yourselves? If what has recently been said in these pages is true, that "the supervisor is a teacher of teachers," then the same measuring stick that applies to the teacher in the grades ought to apply to the "teacher" in the principal's office. What are some of the first questions you ask, proper certification being assumed? They deal with the personality of the teacher and her effect on the pupils. No matter what form your questions may take, you judge a teacher very largely by her ability to inspire, to lead, to stimulate her pupils, to bring them up to their best selves. You measure her by the school spirit she develops, by the reaction she gets from her pupils. Is it unfair or undignified to apply the same test to her superintendent? Suppose, for a little diversion, instead of asking "What kind of school spirit has she in her class?" we say, "What kind of school spirit have *I* in my faculty?" not "What do the pupils think of her?" but "What do the *teachers* think of *me*?" change "Is she equal to her job?" to "Am *I* equal to *mine*?"

In a recent number of the SCHOOL BOARD JOURNAL a leader among schoolmen says, "We are generally concerned with what the supervisor thinks of the teacher." Would it not be interesting and highly worth while to learn what the teacher thinks of the supervisor?

For more than two decades it has been my privilege to associate with teachers and as *my* superintendent is not the superintendent to whom they are accountable, they discuss affairs freely in my presence. I often wish I could secrete a few schoolmen of my acquaintance behind a nearby screen. It might result advantageously for both sides of the screen.

We agree that the *morale* of an army is of the utmost significance; that a teacher can largely be judged by the spirit of her class; just as truly can a superintendent be judged by the reaction he gets from his faculty. A schoolman of many years' experience said in my hearing a few days ago, "Given the average group of teachers, the consensus of opinion of their superintendent is about as near the truth as one can get."

The normal boy sizes up his teacher more accurately, in less time, than her superintendent possibly can; the average teacher gets a truer estimate of her superintendent in two months than the average school board does in two years. She can not avoid knowing whether or not he is on his job, the spirit he creates amongst his teachers, the effect he has on the class he visits (and on the teacher), the attitude of the pupils toward him. Is her opinion of no consequence? Surely, and for reasons very similar to the ones that make a boy's estimate of his teacher important, a soldier's evaluation of his commander.

Could any man of lesser stature have accomplished what Robert E. Lee did with his famished, ragged soldiers? Could an unpopular leader, himself lacking sublime enthusiasm, have given us the page in history we entitle San Juan Hill?

Charles M. Schwab, in his stimulating book says, "Bethlehem's biggest asset is not its rolling mill plants, its gun shops, its armor works, its rail mills; it is the men who make up its enthusiastic organization." I like the word enthusiasm—only a popular leader can evoke it. Writing of Captain W. R. Jones, Superintendent of

Carnegie's first steel plant, Mr. Schwab says, "Uneducated, unpolished, outspoken, old Captain Bill, was one of the most magnificent leaders of men America has ever produced. Everybody who worked for him idolized him and this idolatry made it possible for him to break all previous records in steel production." Of the Steel King he says, "Mr. Carnegie's personality would enthuse anybody who worked for him." Probably this fact had something to do with his becoming the Steel King.

How can a superintendent enthuse his corps? In the same way in which a teacher inspires regard, confidence, and high ideals in her class. Courtesy is a pretty good way to begin. The man who is as careful of his cigar, his hat, his attitude in the office chair when only his co-workers are present as he is when a trustee or a richly dressed parent arrives, gives expression to an innate refinement that smoothes the way for many things.

Almost all really big men are courteous. A nurse once said to me, "An eminent physician is *sure* to be thoughtful and courteous to everyone, including the colored boy who opens the door as the great man hurries to his car; it is only when you get a little two-by-four doctor that you can look out for rudeness and airs of superiority. The greater the physician the more considerate, has been my invariable experience."

Dr. William Pepper, of the University of Pennsylvania, had as one of his mottoes, "Never be too busy to be courteous." It was a pleasure and an education to see him live up to his creed, especially with a servant, a child, or a timid old person. I recall especially hearing him say to a secretary, "I know that these figures and formulas are hard to transcribe and I shall appreciate it very much if you make me four *exact* copies." He might have given his command very differently. Dr. Pepper was not the type of man who would keep on his hat in the elevator in the presence of girl stenographers and remove it the instant a wealthy woman entered.

Closely related to courtesy is simple kindness and fair dealing. Again quoting Mr. Schwab, "The man who gets the loyalty of his employes is the man who has, first of all, a reputation for fair dealing. Men gage fair dealing quickly and respond to it. There has never been so much sentiment in business, so close a spirit of co-operation between employers and men as there is today." "He was a hard taskmaster but a just one" is part of the glowing tribute paid by a college man to his football coach. Kindness and charitable judgment by no means imply a lowering of standards. Teachers, like pupils, admire the leader who holds them up to a stiff, muscle-developing task; and like them are quick to appreciate charity in judging. If a boy who is usually faithful, falls below his standard in work or even in deportment, the wise teacher does not pounce on him the first instant, but waits to see if the fault grows or if there was some unfortunate cause for the lapse—lowered vitality, trouble in the home, etc. The loyal superintendent is equally fair.

I know one teacher who, in five years had not failed to be in her room at the required minute, usually much earlier. One stormy morning she entered the building at the time she should have entered her room. After walking up five flights and removing her storm clothes she reached her desk *four minutes* after the prescribed tick of the clock, to find a typewritten slip already there, "Miss Blank will please mark herself tardy."

How many superintendents are as punctual as they require their teachers to be?

One faithful girl said to me lately, "I could not have gone back so soon after I had gripe if our principal had not been so considerate. He told me I would be worth more sitting down than a substitute would be standing up, and he himself asked the monitors to help me all they could. He took charge of my periods in study hall all of the first week and is constantly so kind about the little things that we teachers want to work our heads off for him."

The good teacher is careful how she retains pupils after school hours. How about the superintendent who demands the time and strength of his co-workers for unprofitable teachers' meetings? Mark you, *unprofitable*. A conscientious teacher cheerfully attends a meeting where she knows she will get something; if you question it do what one of my friends did—arrange for really helpful, stimulating, top-notch meetings, then make attendance voluntary. Too often teachers are asked to remain for a weary two hours while

"Too deep (or too weak) for his hearers
He went on refining
He thought of convincing
While they thought of dining."

There is a tide in the affairs of pupils when their future depends very largely on the stimulus or repression of their teacher. There is a tide in the affairs of many young teachers when their professional future depends, to an alarming extent, upon the influence of their supervisor. I know one young girl now who is blunting her enthusiasm and starving her ideals under unfortunate conditions which, if continued, will carry her over into a mechanical, bloodless keeper of a school. It is the duty of the teacher to teach, train, and develop her pupils, and they are quick to perceive whether she does this or not. In like manner it is the duty of the supervisor to teach, train, and develop his teachers, and his reputation among them depends largely upon the fidelity with which he discharges this obligation.

Frank A. Vanderlip recently closed a talk to businessmen with the words, "Finally, don't be niggardly in *expressing appreciation*." The motto of his bank is, "Only a happy worker is a truly efficient worker."

The head of the Bethlehem steel industry believes thoroly in the profit sharing system. So do worthwhile schoolmen and they live up to their faith by constant acknowledgment of the loyalty and co-operation of their associates. When the annual budget is made up these men endorse *profit sharing* in a material way. After an annual session with one such man the president of the board said, "Mr. H. is certainly the friend of his teachers. He gets their salaries up when he knows it risks his own increase."

There are instances, I know, where schoolmen have secured for themselves a nice additional slice when that made it impossible to increase the salary of a single teacher in the corps. Happily they are few.

The greatest factor in winning the teacher's loyalty, a loyalty that means "trusting each other and cheerfully making good each other's defects," yet remains to be mentioned—the personality of the superintendent. We are probably agreed that the most important single factor in the schoolroom is the personality of the teacher; that of the superintendent is equally important in the larger field where he is "teacher." The man who merits the respect of those who know him best, of whom a teacher says, "I want my work to reach his standard, first and foremost because he has such high ideals and such confidence in us," the man whose teachers know he is their loyal friend, the

(Concluded on Page 77)

Efficient Finance in a City School System

Frank W. Ballou, Assistant Superintendent of Schools in Boston

Recently in a small gathering of educators, the subject of financing education was under consideration. One of those present, whose position and professional standing command respect for his views, expressed himself as believing that the subject of financial economy in education was not worthy of the consideration of educators. He argued that it is the business of educators to get and to spend as much money as possible for education. He defended his position on the ground that it is impossible to spend too much money for educational purposes.

The writer believes that this is both an indefensible and a dangerous theory. Let it be conceded that many communities might profitably spend more money for public education. Let it be further assumed that the financial expenditure of a community for education brings greater returns to society than an equal expenditure of money for any other public purpose. Grant that education is one of man's most cherished enterprises. Concede to public education every value that the most vivid imagination can picture for it; even then one would not be justified in thus assuming that the financial resources of a community constitute an unlimited supply of money on which educators may write sight drafts at will.

Such a theory is dangerous, because it implies that because of the nature of the undertaking an educator should not be held responsible for an economic expenditure of the funds provided for educational purposes. Men in the educational profession have always been peculiarly free from any imputations of profiting dishonestly by reason of the positions which they hold. However, their responsibility for a judicious and economic expenditure of school funds is as great as their moral responsibility for spending school money honestly. Every public official is morally bound to expend public money so that it will best serve the purpose for which the public provided it. To this principle the educator should be no exception. Neither the esteem which the people of a democracy have for public education, nor the readiness with which the public provides millions annually for educational purposes, justifies society in relieving those in charge of educational expenditures from those administrative principles of responsibility and accountability which within recent years have forced higher standards of honesty on all types of governmental officials than have hitherto prevailed.

It is because of these strong convictions which I hold regarding the responsibility of educators for economic and judicious expenditures of money which the public places at their disposal, that I promised to read this paper today.

* * *

Efficient finance in a city school system depends primarily on a reasonable amount of money for the needs of the schools and a rational plan for its distribution to serve those needs. A reasonable amount of money can best be secured thru a fixed tax rate, with the board of education possessing, within limitations, the tax levying power. A rational distribution of money depends on an effective system of budget making.

A Reasonable Amount of Money for the Schools.

The constitutions of the several states of the Union charge their respective state legislatures with the responsibility of maintaining systems

Note.—The present paper constituted the basis of a valuable address and a general discussion of methods of financing schools at the Round Table of Superintendents of Large Cities, meeting of the Department of Superintendence, February 28, 1918, Atlantic City, N. J.—Editor.



DR. FRANK W. BALLOU

of public education. The legislature in some states has given large authority to the state department of education and correspondingly less authority to local communities. In other states the state department has little authority and the local educational systems are largely independent of any state direction or control. Whatever system a state legislature has instituted for providing education, and however much or little authority is imposed in the local administrative unit, the responsibility for that system of education rests directly with the state legislature.

Public education is a state function. The fact that education is administered by a local school committee or board of education does not alter that fact. The board of education acts as an agent of the state as well as a local agent. Logically and legally, therefore, the state legislature may fix the tax rate and thereby determine the amount of money to be provided for school purposes for any city. Not only should the legislature fix the minimum and maximum limits of the tax rate, but the board of education should also be given the authority to appropriate and levy within those limits, the amount of money necessary for educational purposes.

The board of education, rather than any department of the city government, should possess the tax levying authority for school purposes, because the board is organized for the purpose of providing education and is more cognizant of the needs of the schools than is any city department. It may be stated as an axiom in educational administration that whoever controls the money for school purposes controls the schools. He who eliminates from the school budget the money needed for an educational activity deprives pupils of an opportunity of participating in that activity. That administrative agency which controls the appropriations in the school budget also by that fact determines the educational possibilities of the school system. That agency should be the board of education.

In all important respects this arrangement now exists in Boston. The tax rate for all school purposes is fixed by law at \$4.50 per \$1,000 of valuation. In these respects the Boston school committee is more fortunate than the school department in many of the cities in which the board of education must rely upon some branch of the city government to fix annually the amount of money to be used for educational purposes. The law also empowers the Boston school committee to appropriate money

up to that amount subject only to the approval of the mayor. Moreover, by an affirmative vote of four of its five members, the school committee may, within the limits of the tax rate, make appropriations over the veto of the mayor.

The Advantages of a Fixed Tax Rate.

Fixing the tax rate by law and giving the board of education the authority to appropriate money up to that amount has decided advantages.

1. If the board of education has the authority to appropriate money largely or wholly independent of the municipal government, school finances are kept out of politics.

Among the city budgets the school budget is comparatively large, and, hence, there is the largest opportunity for apparent economy thru reductions of budgetary estimates. For political effect, or for more worthy motives, every municipal administration desires to keep the tax rate down. The educational needs of every growing municipality are legitimately increasing. With these conditions it is inevitable that the school budget will be considered from a political point of view rather than from the point of view of the pupils for whose education the budget is to provide. If the school budget must run the gamut of the political departments of the municipal government, as it does in many cities, it inevitably suffers reductions, many of which are wholly unjustifiable. Such a procedure is an annual menace to the school budget and, hence, to education.

2. With a fixed tax rate the amount of money for school purposes increases as the assessed valuation of the city increases. In Boston this amounts to approximately \$150,000 per year. In less fully developed cities the relative annual increase would be more. This increase in the amount of money for school purposes is automatic and depends wholly on the increase of the assessed valuation. The Boston school committee may, therefore, count on approximately this amount of money each year for additions to or extensions of the school system.

3. A fixed tax rate makes it possible for the board of education to carry out a systematic educational policy over a period of years. If the board possesses the appropriating power, the schools can rely on a judicious appropriation. As has already been stated, the agency that appropriates the money for educational purposes is the agency that controls educational policies and limits educational activities. Since the board of education is selected to provide for the education of the pupils of a city, it should likewise have control, within reasonable limits, of the funds which this same city provides for educational purposes. Without such control, no city may hope to harvest the fruits of a consistent, far-sighted, educational policy.

Conditions of Efficient Budget Making.

Having discussed the need of a fixed tax rate as a means of securing a reasonable amount of money for educational purposes in a city school system, let us now turn our attention to the other aspect of efficient financing, viz., the preparation of a school budget, according to which the available money is to be spent. I shall discuss what appear to me to be five conditions of efficient budget making.

1. The first condition of successful budget making is knowledge on the part of those who make the budget, of the amount of money to be available for school purposes during the financial year for which the budget is to be made.

In conducting one's personal business successfully, one decides on his expenditures in relation to his income: whether he will pay \$50 a

month rent for a comfortable apartment or \$70 for a house; whether he will take a vacation trip to the Pacific Coast during the summer, or only week-end trips; or whether he will buy a Ford or a Packard, depends on whether his income is \$2,500 or \$25,000. So in making a school budget the amount of money which can or should legitimately be spent for the several activities of a school system depends directly on the amount of money available. With a fixed tax rate this condition of successful budget making is satisfied.

2. The second condition of effective budget making is the general recognition that making a school budget is primarily an educational function and as such should be supervised and directed by educators.

For the same reason that the board of education rather than any department of the city government should be the final authority, subject to veto power by the mayor, in levying the amount of money called for in the school budget, the superintendent of schools, rather than the business agent or secretary, should supervise the making of the school budget. Because the superintendent has the knowledge and is the only executive officer in the school system who does necessarily possess the knowledge of what the broad, general educational policies are according to which the school system is being developed, the superintendent should not only direct the preparation of the budget, but he should also supervise the necessary reductions and eliminations from the preliminary budget. This should be considered not merely his right but his duty, because such reductions and eliminations undoubtedly directly affect the many educational activities of the school system, for the success of which the superintendent is held directly responsible.

It is relatively immaterial who actually compiles the budget, or who makes the original estimates. It is, however, of fundamental importance that the estimates should be prepared according to the educational policies of the superintendent's office, and that the eliminations and reductions should not be made by those who may or may not be familiar with the effect which such eliminations and reductions may have on the educational activities of the school system.

Recognition that educational financing is primarily an educational and not a municipal function will result in giving the board of education authority over appropriations for school purposes, and will remove from the city government approval of the board's appropriations, except approval of the most limited kind. Within the school department the recognition of this same principle will make the superintendent responsible for the preparation of the budget and for the necessary reductions and eliminations which must usually be made to bring the estimates within the amount of money available.

Time as a Factor in Budget Making.

3. The third condition of successful budget making is an amount of time for making the estimates commensurate with the difficulty of the problem and the importance of public education.

The amount of time now available for making a school budget varies materially among cities. This variation is due, in large part, to the fact that the procedure in the school department is determined by the action of various departments of the city government.

In Boston, the assessing department usually announces the annual valuation and fixes the tax rate sometime in August. From this valuation there must be deducted the abatements to December 31. The assessing department is allowed until January 10 to compute the abatements and to make a report to the mayor show-

ing the average valuation for three years, less abatements, on which all taxes are based.

The financial year begins February 1. The rules of the school committee require that the budget estimates be presented to the school committee at or before its last meeting in February. Unexpended balances cannot be computed until the end of the preceding financial year, January 31. Hence, it is impossible to prepare a final budget for the committee much earlier than its last meeting in February. Inasmuch as the new school committee organizes at its first meeting in February, it is desirable that it be informed of financial conditions in the school system and of school policies as early as possible.

If the details of a school budget are to be worked out in Boston as carefully as the amount of money involved and the importance of public education would seem to indicate they should be, more time for making the budget should be provided than is now available between the time when the actual money available for a final budget is known and the time when the new school committee should begin to consider the budget in February.

Inasmuch as the whole city administration should not be asked to change its methods of procedure to accommodate the school department, any desirable change must be brought about thru a modification of the present procedure of the school committee in preparing a school budget. The Department of Educational Investigation and Measurement, which was asked to make a study of the system of budget making, proposed that more time be secured for making a school budget by estimating in advance the amount of money likely to be available from taxation, from income, and from unexpended balances, and proceeding at once with the preparation of a tentative budget.

Necessary data for making such estimates are available as soon as the assessing department announces the valuation of the city, usually during August. It was proposed that the preparation of a tentative budget be begun by December first. This would give two months within which to prepare a tentative budget, which could then be presented to the school committee at its first meeting in February. Two months is not too much time in which to secure estimates from all sources, to hold necessary conferences on those estimates with those who made them, and to make such revisions of them as are clearly necessary before presenting them in the form of a tentative budget to the school committee.

Accuracy in Making Estimates.

Obviously, the effectiveness of this suggested method of preparing a budget on the basis of estimated money likely to be available depends directly on the possibility of making fairly accurate estimates. This is not the proper occasion for discussing in detail the statistical methods by which the department showed that such estimates could be made. It is important, however, to describe briefly the problem involved and to indicate the results secured by applying the statistical method.

While the money available for school purposes comes from taxation, from income, and from unexpended balances, more than 96 per cent of the total amount available comes from taxation. If the proposed method of estimating gross income succeeds, it must provide a satisfactory method of estimating the amount of money likely to be available from taxation.

A statistical method of making estimates of money available from taxation was worked out and applied to the twelve years from 1905 to 1916. In each case the estimate of the amount of money available from taxation was within \$10,000 of the actual amount. In three cases it

was within \$1,000 of the actual sum available. In the nearest case there was a difference of only \$228.21 in the amount of money actually available and the estimate of the money that would be available. In eight out of the twelve years, or 75 per cent of the cases, the estimate was within \$3,000 of the actual figures. When one considers how relatively small these differences are in the budget of over \$6,000,000, it is clear that the results from the application of this statistical method are sufficiently close to the actual results to make the method reliable for this purpose. Because the estimates of gross income can be made in advance, Boston now begins the preparation of a tentative budget December first. When the actual amounts of money are later known, the preliminary estimates are corrected accordingly.

This method has been discussed here briefly because it illustrates how statistical science has contributed to the satisfactory solution of a pressing administrative problem.

Co-operation and Definition in Budgetary Duties.

4. The fourth condition of successful budget making is a clear definition of the authority and responsibility of those who make budgetary estimates.

In a small city school system, where the superintendent's office purchases and distributes books and supplies, buys the coal, and makes all the estimates for the budget, the force of this condition will not be apparent. In a large city school system the situation is quite different.

The administration of the large city school system is so divided and subdivided that a clear definition of authority becomes necessary. In Boston the business agent is separate from and independent of the superintendent's office. Further, the business agent, the secretary of the school committee, the schoolhouse custodian, the schoolhouse commission, the superintendent, and the various supervisors, directors, and principals under the superintendent prepare budgetary estimates. Under such circumstances, the need of clearly defined authority is obvious.

Where so many different officials participate in making budgetary estimates there must be hearty co-operation. Co-operation secured on a purely personal basis is seldom permanent. Co-operation secured as a result of clearly defined duties, responsibilities, and relationships of each person in the undertaking can endure because co-operation does not then depend on relations of personal friendship.

In those periods of stress and trouble which are likely to come in the administration of any school system, clearly defined official authority will assist materially in solving the difficult problems. Under favorable conditions the absence of clearly defined authority may not cause trouble. On the other hand, during times of stress, the absence of such well defined duties and responsibilities may prove a calamity.

5. The fifth condition of successful budget making is knowledge on the part of those who make the budget of the annual costs of the several school activities over a period of years.

The budget estimates for any financial year have a direct relationship to the actual expenditures of the preceding year. Nearly all the estimates for the annual budget are for the maintenance of activities already under way. In any annual budget comparatively a very small proportion of the money appropriated is for the introduction into the school system of entirely new activities.

In order that knowledge of the amount of money expended in previous years may be utilized in budget making, there must be (a) a detailed system of accounting intimately related to the appropriation items in the budget; and

(b) an adequate plan for disseminating this financial information by the business office among those who make budget estimates.

In the cities of the second class where, in many cases, the superintendent of schools acts as secretary of the board of education, where the business affairs of the board are handled by the superintendent's office, and where there are at most only a few subordinate officers who make budget estimates, knowledge of expenditures is already in the possession of those who make the estimates. In the larger cities, however, where the business affairs are centralized in a business office, whether under the direction of the superintendent or independent of him, such is not the case.

Centralization of Budgetary Work in Superintendent's Office.

Differentiation of functions in order to fix official responsibility and to increase efficiency is undoubtedly sound administrative practice. Nevertheless, the centralization in one office of all business matters relating to education has undoubtedly tended to promote the feeling that educators should not concern themselves with educational finances. More important than this, it has also tended to make it difficult, if not impossible, for any one in the school service to keep himself adequately informed on educational costs. In most cities, the only participation one has in financial matters is to write his requisition and to forward it to the business or purchasing agent. He never knows how much expenditure his requisition entailed, for he never sees the bill. To be sure, at the end of the financial year a report is issued, but the expenditures of a school or department, or of any activity, are so generalized and summarized that for the most part the report furnishes inadequate information concerning detailed costs.

This statement is not to be taken as a criticism of the business office of the Boston school committee. The business office as such is not here under consideration, and the report of the business agent compares favorably with the corresponding reports from other cities. The statement is made to indicate a further necessary step in order to counteract the price which we pay for the differentiation and specialization to which reference has just been made. By segregating the business matters into one office or department, financial information necessary to the educational offices has been taken away. For effective administration of the superintendent's office, this knowledge must be restored.

If the school budget is to be more than a clerical compilation of original estimates made by scores of people largely on a personal rather than a fact basis, those original estimates must be carefully scrutinized by some one in authority and the school committee relieved from considering clearly unwarranted estimates. When the school budget reaches the school committee it should be a well-balanced, detailed, statistical analysis of the estimated expenditures for the next financial year. Such a budget can only be prepared in relation to the annual expenditures of preceding years and in consideration of the extensions contemplated in the general educational policy of the school system.

When considering budget estimates the superintendent needs to have before him a statement of annual expenditures for various educational activities over a period of years, in order that he may distinguish among the estimates furnished him those that are necessary, those that are desirable, and those that are clearly for extension of activities. Appropriations would naturally be made to satisfy these estimates, in order named, and the appropriations for extensions of activities should not be made until the necessary and desirable expenditures for all present



DR. WILLIAM L. ETTINGER,
Superintendent of Schools-elect, New York, N. Y.
(See page 41).

activities have been largely, if not wholly, provided for. With a detailed statement of expenditures before him the superintendent has a comparatively reliable fact basis on which to judge the trustworthiness and justification of the estimates of his subordinates, and also has a fair basis for approving, reducing, eliminating, or increasing those estimates.

If budget estimates are to represent adequately the amount of money needed, they must be based on facts and not on fancies. The most reliable fact basis is that furnished in an adequate system of accounting. If the information contained in the accounts is to be available, it must be made accessible thru some plan which shall be recognized as an integral part of the system of making a school budget.

A Final Summary.

In this paper I have maintained that efficient financing of public education in a school system is contingent on securing a reasonable appropriation for the schools and also on a rational plan for distributing that money among the activities of the school system. I have tried to show that a reasonable amount of money can be secured for the schools thru establishing by law a minimum and maximum tax rate and giving the board of education authority to appropriate and levy within these limits the amount of money necessary for educational purposes. I have pointed out three advantages of this arrangement: It keeps school finances out of politics; it increases annually the amount of money for school purposes as the assessed valuation increases; it makes possible the carrying out of a systematic educational policy over a period of years.

A rational plan for distributing money among various school activities requires an efficient system for making a school budget. I have pointed out five conditions of effective budget making: Knowledge on the part of those who make the budget of the amount of money to be available for school purposes during the financial year for which the budget is made; recognition that making a school budget is primarily an educational function and as such should be supervised and directed by the superintendent of schools; an amount of time for making the estimates commensurate with the difficulty of the problem and the importance of public education; a clear definition of the authority and responsibility of those who make budgetary estimates; knowledge on the part of those who make the budget of the annual costs of the several school activities over a period of years.

Many of these essential conditions already exist in Boston and in other cities. Fortunate, indeed, is that city in which all these conditions are to be found, because efficient financing is at the foundation of every successful administrative system of public education.

THE ELIMINATION OF TARDINESS

Frederick V. Rockey, Principal of Schools, Camp Hill, Pa.

Like most suburban towns extending over a large territory Camp Hill has had in tardiness its one great evil. How tardiness was met, fought and conquered, is the purport of this brief article.

The Camp Hill high school has an enrollment of sixty pupils. Up to the school year 1917-1918 it was not unusual to have as many as a hundred tardy marks each month. All sorts of ways and means were devised by the faculty to conquer the evil but no method applied seemed to have the desired effect. Tardiness continued. Retention of pupils after school hours, written excuses required from parents, personal interviews with the parents of frequent offenders, the compelling of pupils with a certain number of tardy marks to take the final examinations—all were tried but with indifferent success.

But, at the beginning of the school year new ending, a plan was put into operation that has reduced tardiness to the lowest possible minimum. It was this:

A Board of Tardiness was chosen from among the pupils of the high school. This board is composed of five members: two seniors, one junior, one sophomore and one freshman. One of the senior members is a boy who acts as chairman of the board. The other senior member is a girl who acts as secretary. Each class chooses its representative upon the board. The board meets in regular session every Friday afternoon after the close of school and considers the cases of tardiness of the week. It decides which tardinesses were unavoidable and exempts those that merit exemption.

Every pupil who is late and who wishes to put in a claim for exemption secures the following blank from the secretary of the tardy board, fills it out, and returns it to the secretary before the Friday meeting.

Date Tardy
Morning or Afternoon
Reason for Tardiness
.....

I certify upon my honor that the above is the true reason for my being tardy.

(Sign name)

The following constitute valid claims for exemption:

1. Late cars.
2. Drifted roads for out-of-boro pupils.
3. Lateness of pupils coming from a distance because of bad weather conditions.
4. Paper boys who are late because of bad weather or late arrival of papers.
5. Grocery order boys who are late because of the taking of orders that could not have been taken before school.
6. Urgent duties, the execution of which was impossible before or after school.

The tardy board may revoke any claim which it may think unjustifiable. It investigates each claim and has the power to call before it any pupil whose claim needs some additional explanation.

Pupils who do not file claims before the board meets and pupils who refuse to appear before the board when requested to do so by the chairman forfeit all claim to exemption.

(Concluded on Page 77)

New Conditions of the City School Superintendency

William E. Chancellor, Wooster, O.

The outstanding new fact of the city school superintendency in America is the large number of cities that have greatly increased the salaries of incumbents since 1913. The most conspicuous case is that of Cleveland where the salary has been moved up from \$6,000 a year to \$12,000; but there are many smaller cities also that have doubled and even more than doubled the salaries in this period. As for the cities that have increased the salaries from 25 per cent to 75 per cent, they far outnumber those which have not changed the salaries.

This economic change has especially affected men most of whose annual expenditures are not for the sheer necessities of life. Since it is in these necessities rather than in the comforts and luxuries that the vast increase in prices has taken place, this salary change has considerably eased the finances of most city school superintendents. The man whose city has increased his salary from \$2,000 to \$3,000 has had his family expenditures for necessities increased perhaps \$400 to \$500; but he has gained a margin for new comforts and even some luxuries. The superintendent whose salary has been increased 50 per cent may not have been able to keep even a horse and buggy in 1913 but now probably has a good automobile as his property.

These superintendents with considerably increased incomes find that they have been moved upward faster than their professional brethren of the ministry, whose salaries have generally not been increased in the same pastorates. The incomes of lawyers appear to have averaged less in 1917 than in 1913. Architects have had reduced incomes. Physicians, however, have improved somewhat. But in general the supervising educators have risen in economic position relative to the men of all other professions. In cities of from 25,000 to 250,000 population, city school superintendents still have usually smaller salaries than the best-paid preachers, less incomes than the best physicians and dentists, lawyers and architects, but they are going upward faster. This economic change affects considerably their social prestige. As for the superintendents in the larger cities, their relative position is somewhat improved but not so much as in the group noted. In cities under 25,000 population, the city school superintendents often do almost as well net as the leading men in all other professions. It is not fair to compare the best lawyer or the best physician with the school principals, for the city school superintendent is presumably the leading educator; and obviously, on the other hand, it is unfair to compare the city school superintendent with the average physician or lawyer or minister. In this respect, public school supervision is unlike all the other professions, for they have no officially determined leaders.

The second new fact about the city school superintendents is educationally far more important. Possessed now either by public assignment or by private purchase of good motor cars, our city school superintendents have become visiting school inspectors and have ceased to be desk men and office dwellers. They go to their main offices at 7:30 or 8 o'clock in the morning, read their mail, answer telephone messages, see visitors and then at 9 or 9:30 a. m. they start out to visit perhaps half a dozen schoolhouses by 11 or 11:30 when they drive back to their offices to clear up any business that in the meantime could not be managed over the telephone from the schools where they were visiting. The afternoon is spent in much the same manner. After school, a conference is easily

held in any ward, and still the superintendent can be back in his office for board committee work and to sign the letters dictated earlier in the day and then reaches his home by 5:30 p. m. When necessary, he goes to his office in the same motor car for two or three hours in the evening, which still allows him to get to bed by 10:30 or 11 p. m.

The motor car has emancipated the city school superintendent as it has recreated the county school superintendent.

The present school superintendent, urban or rural, is what he ought to be—a field-worker, not a desk-manager.

The third new fact is that the schools are being revolutionized by changed emphasis upon all subjects and by the very rapid introduction of new subjects, all under the guidance of this kinetic, dynamic, modernized field director of education. And the whole of this revolution has as its hub the city school superintendent; it is a wonderful, a complete and a happy transformation.

Incidentally, something has happened that the statistics prove, tho it does not appear upon the surface. The tenure of the city school superintendent has been improving. The explanation of this requires the consideration of several causes.

Until very recently, every city school superintendent on any tenure for a term of years knew that, for months and months before his time should come for re-election, schoolmen in his city and schoolmen elsewhere were turning their eyes to his coming fortune or misfortune with the intention to canvass for his position in case he fell down; perhaps, even as soon as his troubles began. This was exceedingly hard to bear. Now the cause of this was in series all along the line. \$4,000 a year men were looking to the possibly vacant \$6,000 a year places. \$2,000 and \$3,000 a year men were looking into the \$4,000 and \$5,000 a year places; and so on. At the beginning of the line were 25 and even 22-year-old men with little or no experience even in teaching who aimed to get the superintendencies paying from \$1,000 to \$1,500 a year. The universal service act for able-bodied men of twenty-one to thirty years of age inclusive, the officers' training camps and the army and navy Y. M. C. A. and other extra-war services, have almost completely absorbed this group of would-be school superintendents. Here and there is a man with poor eyesight or flat feet or a weak heart still seeking his first school superintendency; but the drive of thousands of able-bodied, intelligent, well-educated men into school supervision is at an end.

What is the first result? That towns and cities paying \$1,000 to \$1,500 a year are, first, trying to keep the men whom they have and, second, in default of this, are employing women.

The second result is that men above 31 years of age are no longer worried over the likelihood that any effort of theirs to get higher salaries would simply result in the election by their boards of men of less experience to whom the present salary would mean an increase. The fear of replacement by some other educator has been constantly in the minds of our city school superintendents. There will still be replacements, but boards will no longer have a hundred applicants for two or three thousand dollar positions. In consequence, also our educators have developed much more freedom in recommending changes and improvements, no longer fearing that independent thinking and speech may lead to loss of position.

Whether the employment of women as school

superintendents will on the whole improve the administration of the schools of small cities is debatable; but the release of the men in office from the excessive competition of ambitious younger men is unquestionably of great value. Fear and anxiety may be incentives to active work, but they destroy good judgment in doing the work. The man of forty with ten years' experience is distinctly the professional superior of the man of thirty of the same natural ability but with no supervisory experience.

It is true that in several notable instances, cities have lost very strong school executives to war service; their educational leadership will be missed in their cities and states. Nor is there much of any offset. Organized public education can ill spare these men. Nevertheless, their patriotic and often self-sacrificing action serves as a good example to all others in the school service and out of it and helps to a sound public opinion.

There is, moreover, an important effect upon the school superintendent himself from the intense preoccupation of most of his board members and of other influential citizens in war business and in war service; never was he given so free a hand as now. It is true that in many cities, there are bad financial shortages or difficulties; but within the limits of the income, each man is now generally held only for results and has great freedom as to methods and details. In general, therefore, authority is becoming commensurate with responsibility. Hitherto, perhaps the chief embarrassment of the city school superintendent has been that while he has been held responsible for results, he has been required to follow prescribed courses. It was as tho the physician was ordered to cure his patient and then told that he must use certain drugs. American public schools are now being delivered from this absurdity.

Of course, the city superintendent is now in the presence of new great difficulties. There has been a very high percentage of change in board memberships; and there has been an even higher percentage of change in the personnel of the men principals and teachers. He must be making all the time new personal and official adjustments. Nevertheless, here he rapidly gains prestige, which depends almost entirely upon priority in the general service. The man who within two years is the survivor of all the original group becomes the chief just as positively as one who must wait twenty years to be the survivor. A case in point is an Ohio high school where in June, 1917, the principal and nine teachers out of eleven departed and in the next year by April, 1918, the other two teachers had left, so that the new principal in the service less than one year became the only old established educator on the staff.

The war service has taken relatively few men above forty years of age; somewhat more men from 31 up to 40 years, and very many under 31. All this has played into the hands of the veteran educators, conspicuously the city school superintendents and principals. We have seen so far but the beginnings of this movement. It is quite probable that the outcome will be to place the American public school almost as much in the hands of the educator as is the private school; but the *board of education will still keep its foot upon the brake control, and public opinion will set the course*. This public opinion, however, is itself changing so rapidly and so greatly that no one should undertake to predict its nature for even so brief a period into the future as a year hence.

(Concluded on Page 77)

BUSINESS DEPARTMENT OF THE DETROIT BOARD OF EDUCATION

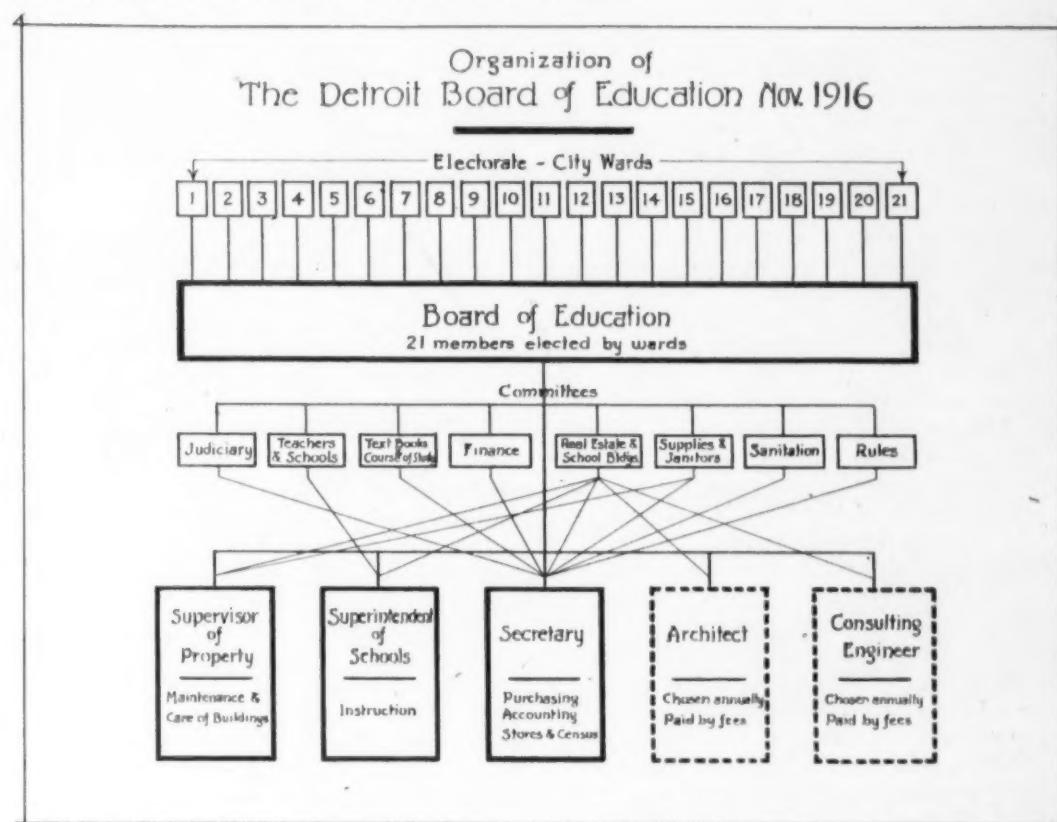
Arch M. Mandel, Detroit Bureau of Governmental Research

When considered in connection with what has been done in other forward-moving cities, the progress made by the Detroit board of education in the administration of its business affairs is not particularly remarkable; but when the organization of the Detroit board at this date is compared with what it was a year and a half ago, the strides are significant. Conditions as they existed in Detroit were typical of conditions still existing in most American cities, so that a review of them, together with a statement of the changes which have taken place, should prove of interest.

Organization Under the Large Board.

Reference to the former business organization is practically a synonymous reference to the entire organization of the board, because by far the largest part of its meetings were taken up with the consideration of administrative business procedure and details. Rarely, if ever, did the board concern itself with or have before it the consideration of the educational policies of the city. A comprehensible discussion of the present business department must include at least a high-spot description of the former organization of the board of education and of the functions of its component parts.

The board was divided into eight standing committees, four of which might have been called major committees because they substantially carried on all the business affairs of the schools. However, for our purposes, only three of these committees are of interest: the committees on real estate and buildings; textbooks and course of study; janitors and supplies. The first was responsible for the purchase of all real estate, construction of new buildings, and the maintenance of all existing structures; the second was concerned with the purchase of all educational supplies and presumably passed upon the course of study; while the last named committee appointed all janitors and engineers and passed upon the purchase of school desks and all supplies used in the care of buildings. The finance committee was merely an auditing body which rubber-stamped all claims and accounts after they were passed by the committees which were responsible for the transactions.



Functions of Executives and Committees.

The executive branch of the board of education was divided into three coordinate departments: education, under the superintendent of instruction; accounting, purchase of educational and cleaning supplies and secretarial functions under the secretary; and maintenance and care of school property under the supervisor of property. Altho the functions of the secretary and the supervisor were finally centralized under a business manager, the committee of the board continued their administrative activities.

Purchasing was practically done by the committees, which not only decided the nature of supplies but actually selected the articles from samples submitted by vendors. Supplies were classified and bought according to departmental subdivisions—educational or elementary school,

high school, manual training, janitors' and engineers' supplies, etc.

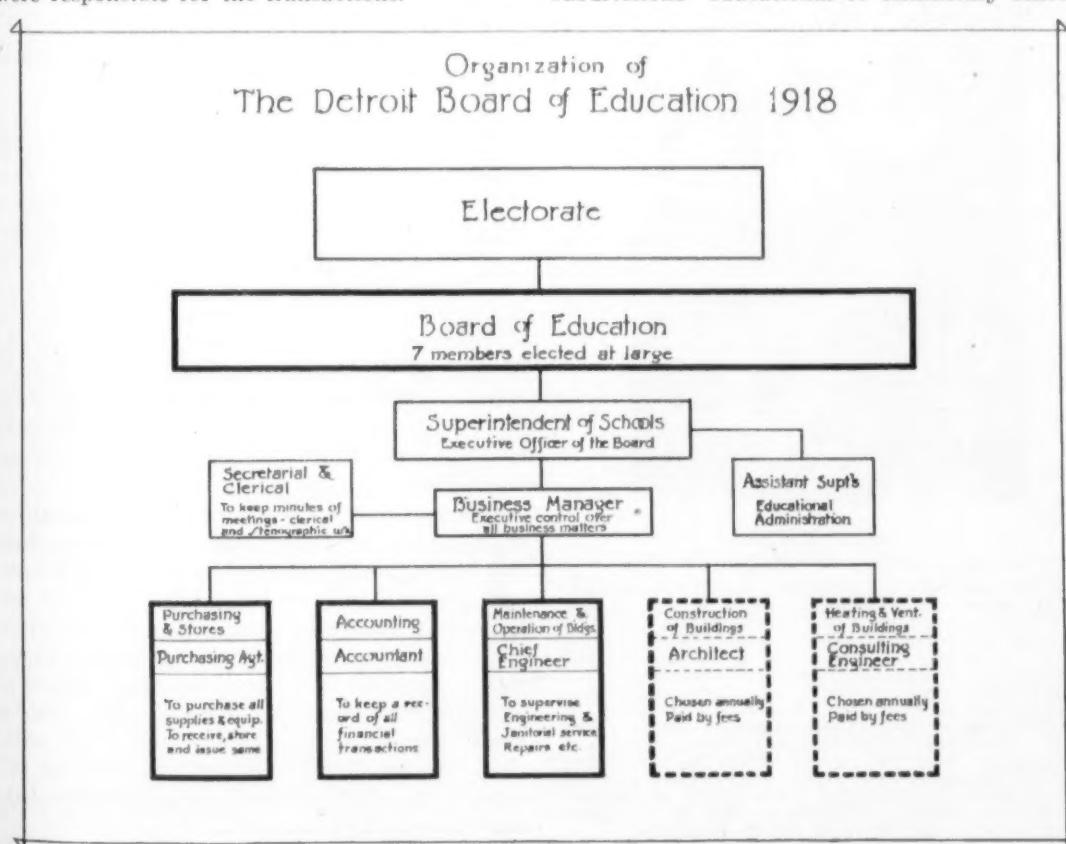
New buildings were constructed under the direction of the real estate and building committee, which approved the plans, let the contracts, and followed the detailed progress of the construction of buildings, as well as a committee meeting once every two weeks could follow it. The Detroit board of education had no building construction department of its own, but employed an architect and an engineer by the year, on a fee basis for work performed during the year.

Maintenance and operation of the 130 buildings were in charge of the supervisor of property until the latter part of the old board's regime, when a chief engineer was appointed, presumably to take over the supervision of the care of buildings; but this division of the two functions was not made, so they are still combined under the one head—now the chief engineer. Janitors and engineers were appointed according to the political spoils system, it being an unwritten law that each member of the board of education had the right to appoint all engineers and janitors employed in the schools in his ward, and in order to apportion the spoils equitably, considerable time was spent by the committee on janitors in adjusting transfers and making appointments to the satisfaction of the interested members of the board. One of the most serious evils attending this method of appointment was the supreme independence of janitors and engineers and their indifference to the authority of superior officers and to the wishes of school principals.

Financial reports and statistics were of little importance because of the failure to appreciate the value of correct, definite and prompt reports. The annual report was usually submitted seven months after the close of the fiscal year, thereby destroying any possible incentive to analyze the operations of the school system for a completed year.

The New Board and Its Work.

On July 1, 1917, a new seven-member board, elected at large, took office. The members are:



School Board Journal

A controller of a large public service corporation, who has been a member of the Detroit board of education for ten years; a railroad president; a lawyer who was formerly a federal judge for the district; a dentist, who was for many years a member of a school board in an adjoining community now a part of Detroit, and who also served as a member of the board of poor commissioners for Wayne county; a physician and one woman, who has been a leader in civic affairs among women, who has given school matters particular attention for many years. The seventh member is a consulting engineer, but resigned because of his enlistment for military service.

The first act of the new board was the adoption of a set of rules, brief and comprehensive, which provided for a logical organization and clean-cut administration of the affairs of the board. The principal features are:

1. Centralization of all responsibility and authority for the executive management of all the affairs of the board of education in the superintendent of schools;
2. Allocation of all administrative details in the executives employed for the purpose;
3. Elimination of standing committees.

Following the organization planned by the rules, the business department is headed by a business manager who is directly responsible to the superintendent of schools, and who has reported to him the chief accountant, purchasing agent, chief engineer, architect and consulting engineer.

Because of the short time which has elapsed since the new board took office, it is inopportune to dwell on the record of actual accomplishments; but a summary of the present status of affairs will indicate results which may be expected in the future.

Purchase of Supplies.

A centralized purchasing department has been created and a purchasing agent appointed, thru whom all supplies of the board of education are bought. Up to the present time the purchase of supplies and materials used in repair of buildings has not been taken over, but it is hoped that this will be done as soon as conditions permit. A schedule of all articles used by the board of education is in preparation, in which the articles are grouped according to their character, rather than according to the use to which they are put; so that in making purchases, bids will be solicited not on elementary school or high school or manual training supply groups, but rather according to trade lines such as stationery, chemicals, hardware, lumber, etc., promoting quantity buying of all supplies of the same nature.

Other contemplated steps fundamental to purchasing are the standardization of supplies and the preparation of uniform, standard specifications. The first will reduce excessive variety on articles of the same nature, due largely to the personal preference of consumers rather than to any fundamental qualities which makes one article more desirable than another, for the same purpose. In short, the best commodity for the need will be selected and bought for everybody in the department requiring it, a procedure which also promotes quantity buying, soliciting bids upon uniform, standard specifications admits real competition and will be of as great a benefit to vendors as to the board of education. The former, by having a definite idea of what is wanted, will be able to bid more intelligently, while the board by having a definite and uniform basis for judging its purchases, will get what it specifies at the lowest price, instead of an inferior article at a low price.

Cost Accounts.

Mechanical equipment is to play an important

part in compilation of statistics. A list of all the articles to be used in the high schools, elementary schools and special classes showing also the code number and the unit of measure of every article will be furnished each department head with the understanding that that will be the basis for requesting supplies. The requisition forms to be used thruout the educational system will indicate the code number of the article desired, the trade name and the use to which it is to be put.

With a few exceptions, all units of supplies to the various schools in the system, will be made upon the receipt of a requisition by the purchasing agent and store keeper. Upon the filling of the requisition by the purchasing department from either the stock or by direct purchases, the articles listed on the requisition will be priced and extended at the store house. This record is then to be transferred to entry cards which are designed to be tabulated by mechanical equipment. All entries on these cards are indicated by code number. A code designed to provide for all the different activities of the board of education is available.

In cases of expenditures for repairs and operation of the school system, a similar procedure is to be followed in the case of requisitions. Pay rolls will be analyzed and coded at the time they are made out and the summaries transferred to tabulating machine cards. Periodically, the reports are to be submitted to executive officers as well as the various department heads for purposes of administration. The information to be had from the tabulating machine entry card is:

1. What is the average consumption of supplies per pupil per subject?
2. What is the cost of instruction per subject per pupil per hour based on the average attendance for that period?
3. What is the cost of maintaining and operating each of the school buildings or parts thereof?

In addition to securing this information in detail by schools, the purchasing department may also secure an analysis of the purchases and deliveries of articles made during any given

period. This information is of great value when operating.

General Accounts.

General accounting records to be operated on a revenue and expense basis and designed to control all the transactions of the board are also being installed. The following current analytical financial statements will be provided: balance sheet, revenue and expense statement, cash receipt and disbursement statement, statement of appropriations, balance transfers, unencumbered and unexpended balance.

The general records will also control the cost system which should produce an absolute and exact cost of carrying on the various functions of the school system because the entries are to be made at the time of the delivery of the article or the rendering of the service.

Maintenance and Operation of Property.

These two functions are centralized in one department under the direction of a chief engineer. For a system as large as that of Detroit, this combination under one individual does not seem to be the best practice; not only because of the extent of the department but because of the two distinct types of work involved and the distinctiveness in qualifications necessary to handle each type to the maximum advantage. However, progressive changes have been effected in this branch of the service.

Engineers and janitors are no longer chosen for political reasons by members of the board, but are hired direct by the chief engineer whose position is divorced from politics. The big problem confronting the board of education in this department, is the adoption of a salary schedule for janitors and engineers, which bears a relation to the service rendered and an equitable distribution of the number of employees to each building in accordance with the actual amount of work to be done. A good beginning was made on the latter phase of the problem by the business manager, but this initial attempt was held up pending a scientific plan by the chief engineer who was later appointed for this purpose.

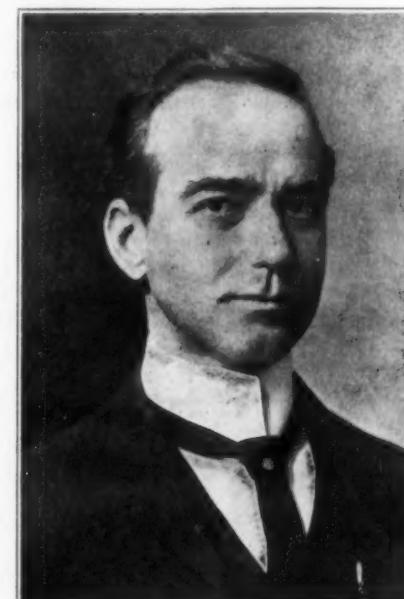
Recently, an assistant to the chief engineer was appointed from among the operating engineers to inspect and supervise the work of engineers and janitors.

In the maintenance of buildings a system of job and cost records have been installed by the chief engineer and progress records which enable him to keep in close touch with this branch of his work.

Construction of Buildings.

As was the case formerly, the architect and engineer are elected annually and paid a fee, covering plans and supervision of construction, for each building erected. After approval of the plans by the superintendent of schools and by the board, all responsibility for the proper completion of the building rests with the architect and engineer. Periodically they report the progress of the building to the board. As it happens, a continuous building policy has been maintained because the same firms of architects and engineers have been employed for a great many years.

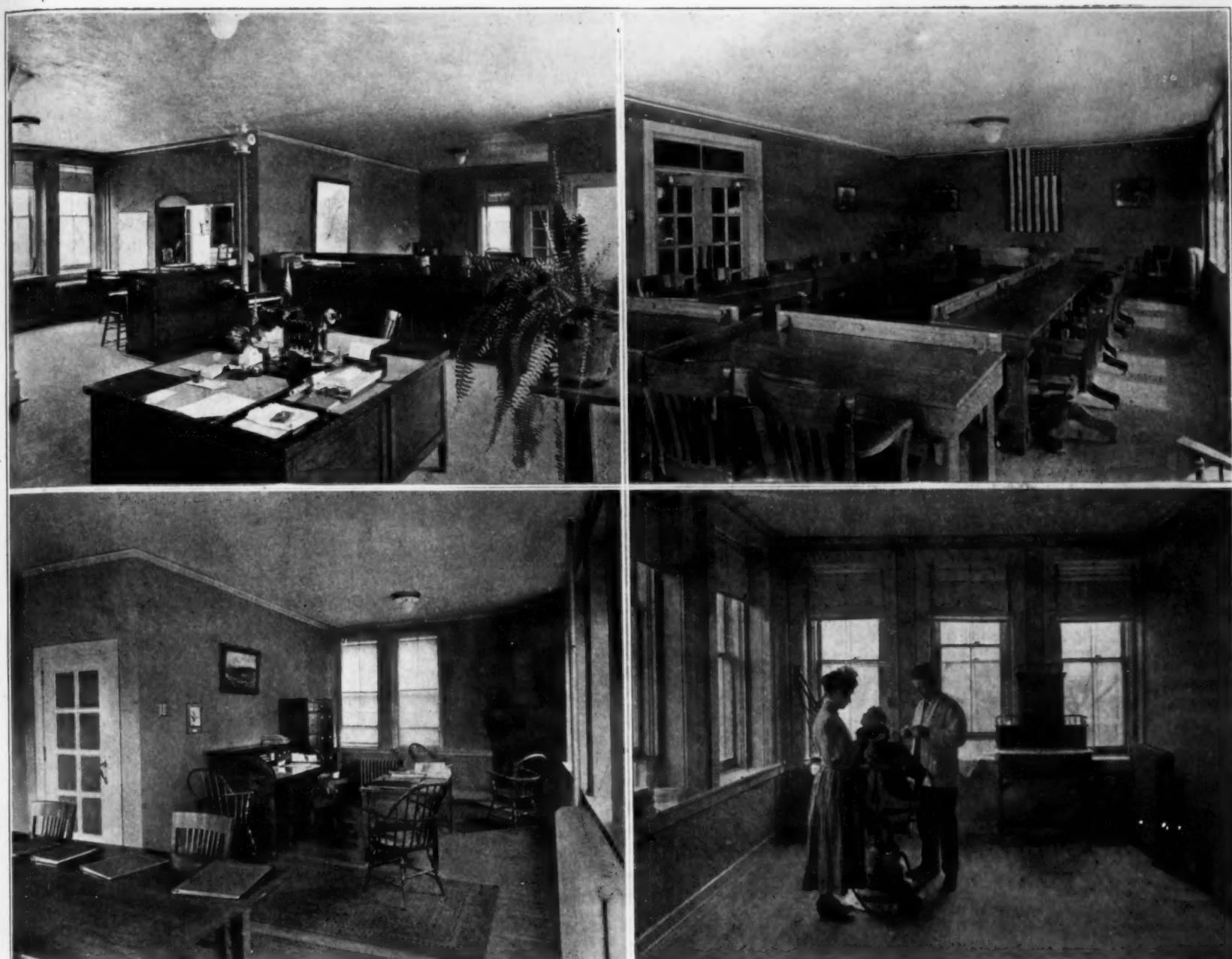
This article is not intended as an exploitation of the theory that good organization and effective administration are inherent in small boards and possible only under such circumstances. Experience has proven that it depends not upon the size but upon the personal equation dominant in the board. It does seem true, however, that efficiency is more easily attainable with a small board and that with a large body with which the standing committee system seems inevitable, administration becomes complicated, cumbersome and amateurish.



H. CARLETON WEBER,
Superintendent of Schools-elect, Nashville, Tenn.

Mr. Weber, who has just been elected superintendent of schools at Nashville, has had a varied and useful career as educator in the central south. He is a native of Nashville and received his earlier education in the University of the South at Sewanee. His teaching career began as instructor in science in the Nashville schools. He has been principal of several grammar schools and of the Nashville high school.

His experience as an administrator includes ten years at the head of the Nashville school system and several years experience in Clarksville, Tenn. He has been a state lecturer on educational subjects and has spoken before a majority of the southern educational associations. During the past two years, he was director of the state depository of middle Tennessee.



ADMINISTRATION BUILDING, ROCKFORD, ILL.

(Above) Left to Right, School Board Office; Board Room; (Below) Office of Superintendent of Schools; Dental Clinic.

ROCKFORD'S ADMINISTRATION BUILDING

C. R. Reed, Superintendent of Schools

The recent rapid growth in the population of Rockford, Illinois, with its attendant increase in school enrollment has caused a necessary expansion in the administration work of the board of education. As the necessity for more office room became apparent the growth of the high school made it impossible to provide proper space for the administration offices in the high school building. To meet this emergency the board of education purchased the property of the Rockford Watch Co. which adjoins the Rockford high school on the south. At the time of the purchase the property consisted of an old unused factory building three stories in height, in the usual poor state of repair which one associates with abandoned factory property, on a large lot having a frontage of five hundred feet and an average depth of one hundred fifty feet. On the lot there was also an old house in very poor condition which rented for a small sum monthly.

In less than five months a transformation has been effected in this property. The watch factory is now an efficient and attractive adminis-

The achievement of the Rockford school authorities, which is modestly described in the accompanying article, deserves close study on the part of school boards. It affords a splendid example of centralization and unification of the educational and business department of a school district for better service and greater efficiency and economy. The most notable feature of the Rockford school administration building is its perfect adaptation to the needs of the schools.—*Editor.*

tration building for the board of education. Besides serving as the headquarters of the board the building also contains the industrial department of the high school and the continuation school for employed boys which has been established this year. The advantages of having an adequate building for administration purposes are being impressed constantly upon everybody connected with the Rockford school.

On the first floor there are the offices of the board of education, superintendent of schools, the attendance department, the superintendent of physical properties and the director of industrial work. The offices of the board are large and well equipped and are furnished with a large vault for the safe storage of all the school records. The office of the superintendent of schools is large enough for committee meetings and small extension courses which are held regularly. The office of the superintendent of physical properties is supplemented by a drafting room with ample storage for drawings and specifications which are a necessary part of the work of that office.

On the second floor there is a room for the meetings of the board of education which is also available for principals' conferences and teachers' meetings. There is also a small room adjacent for committee meetings. On this floor are

found the office of the elementary supervisor and a large room for the use of the supervisors of music, drawing and domestic science. This room is used as headquarters by the supervisors and is constantly in use for teachers' meetings and extension courses. The school dental office is also on this floor and is well equipped for the work. The office of the school physician adjoins the dental office. This furnishes a central place for the keeping of the various hygiene and physical records and is the headquarters for the school nurses.

The third floor is occupied entirely by the continuation school for employed boys. This school is well equipped for the work which it does. There is a large drafting room, technical library, electrical laboratory and several recitation rooms.

In the basement of the building there is the general school shop fitted with woodworking machinery. In this repair shop we are finding it possible to make sand-tables, cupboards and a great many articles of school furniture which formerly it was necessary to purchase. A paint shop and a pipe-fitting shop are on the same floor.

The board of education has found that by employing painters, steam fitters, electricians and carpenters regularly it is possible to handle the



School Administration Building, Rockford, Ill.

repair work in the schools much more economically and efficiently. This method fixes the responsibility for good workmanship and good material upon one person as all of this work is directly under the supervision of the superintendent of physical properties. In the basement of the building there is a general stock room and a room for supplementary reading books. There is also a storage room for surplus furniture, blackboards and other old material

which may be collected from the various schools and inventoried. In this way a substantial saving has been made as much of this furniture has been repaired and sent out in response to orders from the various schools. Whatever is unfit for use is either sold or burned. In this way it is possible to guard against the accumulation of rubbish and useless material which is characteristic of so many school attics and basements. Provision has also been made in the building

for central storage coal bins where about 1,500 tons of coal may be stored in order to guard against coal shortage in times of stress. There is also a garage which is used as headquarters for the school truck and a place for the storage of oil and engine supplies.

One wing of the building is given over to the vocational department of the high school. On the first floor there is a well equipped pattern shop, foundry and machine shop. The remainder of the building is given over to the mechanical drawing department of the high school. By having the mechanical drawing department adjacent to the shops it has been found that the work has a tendency to become more practical. The drawings which have been made this year have been mostly upon the subject of new machines for the high school shops and after the drawings are complete these machines are to be made in the foundry and machine shop and set up as part of the equipment.

The old house which was on the property has been made the basis of the work in the architectural drawing department of the high school. The students have drawn a set of plans for the remodelling of the house. The work is to be done by the boys in the vocational courses. The house when completed is to be used by the domestic science department for the course in home making. It is planned to have a day nursery as part of this work.

A large part of the lot is being used at present for a demonstration garden in charge of the agricultural instructor of the high school.

This property cost \$35,000 and the total amount spent in remodeling the whole property and adapting it to the uses of the board will not exceed \$25,000. In view of the present building costs the results attained from this purchase have been very satisfactory from the standpoint of economy as well as efficiency.

The Standardization of Schoolhouses¹

Frank Irving Cooper

executive departments, etc., there has crept in an element of waste space and inefficient layout,

CHART SHOWING STATUS OF COMPULSORY REGULATION OF SCHOOLHOUSE CONSTRUCTION IN THE UNITED STATES IN 1910

| STATE | PLAN | | CONSTRUCTION | | FIRE PROTECTION | | SANITATION | | FINISHING | |
|----------------|------|----------|--------------|-------|-----------------|-------|------------|-----------|-----------|--------|
| | PLAN | APPROVAL | STRUCTURE | DOORS | WINDOWS | FRAME | PLASTER | STAINLESS | DESKS | CHAIRS |
| ALABAMA | X | | | | | | | | | |
| ARIZONA | | | | | | | | | | |
| ARKANSAS | | | | | | | | | | |
| CALIFORNIA | X | | | | | | | | | |
| COLORADO | | | | | | | | | | |
| CONNECTICUT | X | | | | | | | | | |
| DELAWARE | | | | | | | | | | |
| FLORIDA | | | | | | | | | | |
| GEORGIA | | | | | | | | | | |
| IDAHO | | | | | | | | | | |
| ILLINOIS | X | | | | | | | | | |
| INDIANA | | | | | | | | | | |
| IOWA | X | | | | | | | | | |
| KANSAS | | | | | | | | | | |
| KENTUCKY | | | | | | | | | | |
| LOUISIANA | | | | | | | | | | |
| MAINE | X | | | | | | | | | |
| MARYLAND | | | | | | | | | | |
| MASSACHUSETTS | X | | | | | | | | | |
| MICHIGAN | X | | | | | | | | | |
| MINNESOTA | X | | | | | | | | | |
| MISSISSIPPI | | | | | | | | | | |
| MISSOURI | | | | | | | | | | |
| MONTANA | X | | | | | | | | | |
| NEBRASKA | | | | | | | | | | |
| NEVADA | | | | | | | | | | |
| NEW HAMPSHIRE | X | | | | | | | | | |
| NEW JERSEY | X | | | | | | | | | |
| NEW MEXICO | | | | | | | | | | |
| NEW YORK | X | | | | | | | | | |
| North Carolina | X | | | | | | | | | |
| North Dakota | X | | | | | | | | | |
| OKLAHOMA | | | | | | | | | | |
| OREGON | | | | | | | | | | |
| PENNSYLVANIA | X | | | | | | | | | |
| RODE ISLAND | | | | | | | | | | |
| SOUTH CAROLINA | X | | | | | | | | | |
| SOUTH DAKOTA | X | | | | | | | | | |
| TEXAS | | | | | | | | | | |
| UTAH | X | | | | | | | | | |
| VERMONT | X | | | | | | | | | |
| VERMONT | | | | | | | | | | |
| VERMONT | | | | | | | | | | |
| WASHINGTON | | | | | | | | | | |
| WEST VIRGINIA | | | | | | | | | | |
| WISCONSIN | | | | | | | | | | |
| WYOMING | | | | | | | | | | |

NOTE A: THE PLANS FOR SCHOOLS BUILDINGS IN THIS STATE MUST BE APPROVED BY STATE ARCHITECT.
NOTE B: THESE LAWS ARE PREPARED BY DEPARTMENT OF INSPECTION OF WORKSHOPS, FACTORIES AND PUBLIC BUILDINGS.
NOTE C: THESE LAWS AND REGULATIONS APPLY TO STATE BUILDINGS ONLY.

Chart No. I.

¹This paper was read before the Department of Superintendence of the National Education Association, March 1, 1918.

which almost always results in a waste of public money, and it is this waste which we hope in some way to abolish.

We have nothing which could be called standards of schoolhouse building. It is true that our state regulation has had a great growth during the past five years as is shown in comparative charts for the years 1910 and 1915.

Chart No. I, which illustrates the situation in 1910, shows that only 23 states had laws or regulations dealing with school buildings. These laws and regulations dealt with 26 phases of the building problems.

The agitation during the five years following the publishing of this chart resulted in the passing of regulations in 10 additional states as well as the revision of the laws in many of the states having laws in 1910.

A redrafting of the chart in 1915, chart No. II, showed that 33 states had regulations dealing with 63 phases of the building. We are now at work on a revision of this chart to show the amount of regulations as it stood in 1917.

If there were more uniformity in the laws controlling school buildings they would be more valuable. As it is, there is such a great variation that a building in one state would often be condemned if it were moved one-half a mile across the border into another state.

To show how vitally this affects our pocketbooks it may be said that states having the same regulations as Vermont, New Jersey and Minnesota require 50 per cent more floor area per pupil in classrooms than some of the other states. The taxpayers in the former states must pay \$1.50 for every dollar which it costs their neighbors.

CHART SHOWING STATUS OF REGULATION OF SCHOOLHOUSE CONSTRUCTION IN THE UNITED STATES IN THE YEAR 1915

COMPILED BY FRANK IRVING COOPER, ARCHITECT, BOSTON

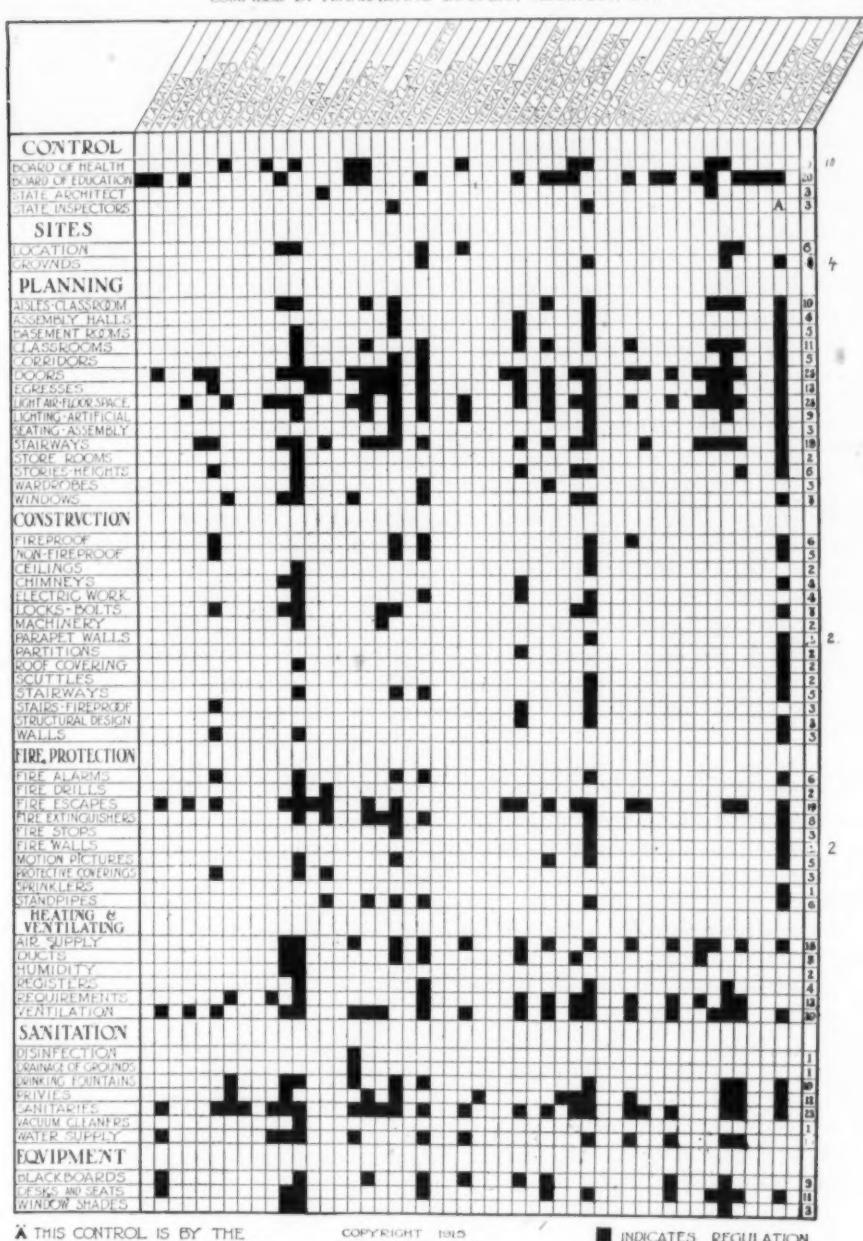


Chart No. II.

This is simply one instance out of many, but it is obvious (without considering which is right) that there should be one best standard, and that all states would be benefitted by adopting it.

To assist in determining what is the best practice in school buildings is the object of the work undertaken by the Committee on Standardization of Schoolhouse Planning and Construction.

Our committee has had no standards of planning to go by. But what we did have was an enormous number and variety of school buildings now in active use which were ready for in-

vestigation with a view to determining what was most desirable in each and what was the best practice in division of space.

I should premise any discussion of our school building tabulation with the statement, that we have not tabulated a sufficient number of school buildings to warrant us in advancing final conclusions.

We have received plans of buildings from architects and superintendents in cities and towns of eighteen widely separated states. Some of these plans have been selected because the

building was of a representative type, some because the architect was a leader in school planning, and some because they were highly recommended by school authorities.

The buildings have been classed according to the school activity into six types, three under grade schools and three under high schools.

1. Grade schools of *one story*, with auditorium, but having no basement and no gymnasium.

2. Grade schools of *two stories*, with auditorium, but having no basement and no gymnasium.

3. Grade schools of *two stories*, with basement, but having no auditorium and no gymnasium.

4. Junior high schools of *two stories*, with auditorium, with basement, but having no gymnasium.

5. High schools of *two stories*, with auditorium, gymnasium and basement.

6. High schools of *three stories*, with auditorium, gymnasium and basement.

Our method of tabulation² has been, first, find the entire area of the building to be measured, the area of the basement and of all the floors. Second, to measure the cross area of each wall, flue, room, closet, corridor—that is, of every part of the building that had area. If our tabulation showed an error of one-half of one per cent from the total area, it was gone over until the error was found.

Our next step was to decide on an arrangement of the *main* divisions of the school building. Our divisions are:

- a—Walls and partitions.
- b—Flues.
- c—Stairs and corridors.
- d—Accessories.
- e—Instruction.
- f—Administration.

The terms walls, partitions, flues, stairs and corridors need no explanation.

Accessories include unmarked spaces and spaces marked "playrooms," "storage," "closets," etc., that did not seem to have any connection with any of the main divisions.

Instruction includes all those areas used directly for some activity that goes to educate the pupil. The gymnasium and auditorium are included in this division.

Administration includes all areas connected with the government and maintenance of the school, the heating and ventilating plant, the sanitary provisions and the wardrobes.

In preparing the tabulation of each building for study, we have used equal strips of cardboard, one inch wide and 22 inches long, one for each building. Each strip has represented one hundred per cent and upon each were laid out spaces for the main divisions into which we

²The tabulations mentioned in this paper have been made in the office of the author in Boston, by an expert building engineer.—Editor.

NATIONAL EDUCATION ASSOCIATION DEPARTMENT OF SCHOOL ADMINISTRATION COMMITTEE ON STANDARDIZATION SCHOOLHOUSE PLANNING AND CONSTRUCTION

PERCENTOGRAPH OF 17 GRADE & HIGH SCHOOLS ARRANGED TO SHOW COMPARISONS OF THE SIX MAIN DIVISIONS OF FLOOR AREAS

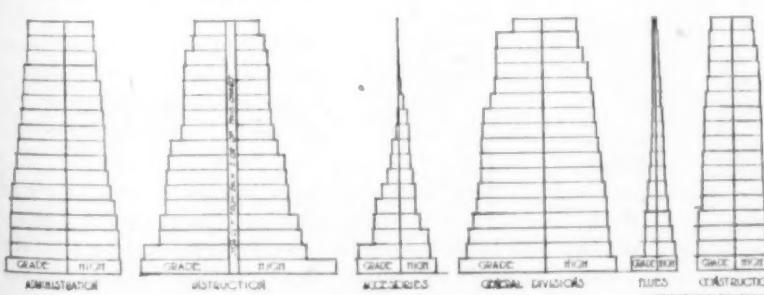


Chart No. III.

NATIONAL EDUCATION ASSOCIATION DEPARTMENT OF SCHOOL ADMINISTRATION COMMITTEE ON STANDARDIZATION OF SCHOOLHOUSE PLANNING AND CONSTRUCTION

PERCENTOGRAPH OF GRADE SCHOOLS

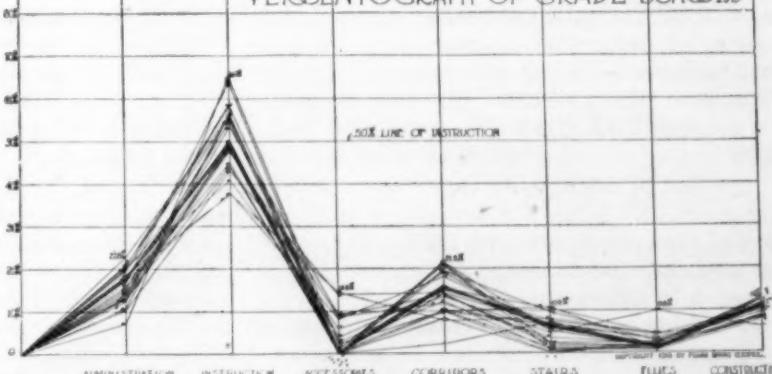
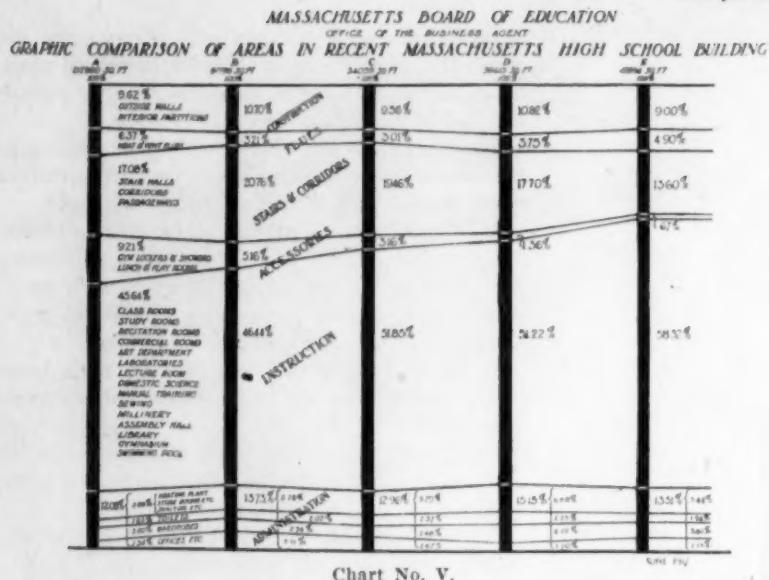


Chart No. IV.



divided the floor area. Upon the back of each strip were laid out the main sub-divisions.

These strips, which look like candles, could easily be arranged to show comparisons between the several divisions of the building without having in each case to again lay out a complete draft.

Each chart has been made by bringing together "candles" representing the buildings we were to compare.

Without attempting any lengthy discussion of findings, I wish at present simply to make clear two points:

First.—Unless later findings change present results, both grade and high schools are comparable that any regulations as to minimum standards may cover both without any differentiation.

Second.—By means of charts covering a sufficient number of school buildings the best standards may be determined.

We have a chart, No. III, which shows a comparison of the percentages of seventeen grade and seventeen high schools, taken without any selection other than sequence, and arranged under our six headings,

Walls and partitions,
Flues,
Stairs and corridors,
Accessories,
Instruction,
Administration.

The grade schools are on the left, the high schools on the right of a vertical line, which represents zero in the graphs of walls and partitions, flues, stairs and corridors, accessories, and administration but which represents 35 per cent in the graph of instruction. Each horizontal section represents the per cent area occupied by a division in one school.

A glance is sufficient to show that in high and grade schools per cent areas for each division are approximately symmetrical.

It may be mentioned that a percentograph which we made of four high school buildings at the extremes of the country, plus one in the Mississippi Valley, showed the graph lines (excepting for boiler and coal rooms) for all practical purposes following each other.

In chart No. IV, each light line represents the per cent area of a single school—the heavy black line represents a school building that had 50 per cent of the area for instruction. A similar chart, with a line for each school tabulated, showed the average space for instruction was 50 per cent. We establish the 50 per cent line as the *norm* in instruction.

By taking the "candle" charts representing grade schools, charts of grade schools were prepared showing per cent areas in each division.

Schools showing high in per cent area for

NATIONAL EDUCATION ASSOCIATION

DEPARTMENT OF SCHOOL ADMINISTRATION

COMMITTEE ON STANDARDIZATION SCHOOLHOUSE PLANNING AND CONSTRUCTION

PERCENTOGRAPH OF SIX TYPES OF SCHOOL BUILDINGS SHOWING INSTRUCTION AREA

ABOVE AND BELOW 50% LINE

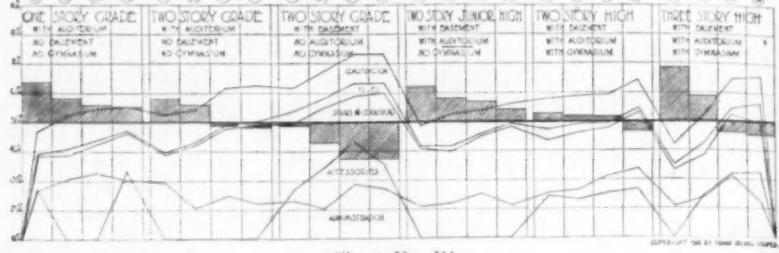


Chart No. VI.

instruction are low in accessories, stairs and corridors, and administration, and indicate that the school officers and the architect had given proper

study to all parts of the plan. Flues and construction being usually subject to definite regulations fall into groups of similar percentages, and do not vary relative values.

A chart constructed on the same principle as the chart for grade schools, but based on the investigation of high schools instead of grade schools makes it evident that high schools and grade schools are comparable. The only reason for separating them has been the often repeated argument that grade and high school buildings could not be covered by the same regulations.

If the large number of high and grade schools investigated so far agree so closely, there is no reason to think that further investigation will do other than confirm these results.

Now the most important part of these school buildings is that devoted to instruction. If the space devoted to instruction falls below the 50 per cent line, it is evident that there are some unusual conditions or the plan has not received adequate study.

Chart V shows five Massachusetts high schools selected by agents of the Massachusetts State Board of Education for tabulation by this committee.

These five schools are in different cities of the state, they range in size from 40,000 square feet to over 200,000 square feet in area. It was supposed that there would be little comparison. But these five high schools offer an interesting example of the close comparison that may be expected where superintendents and architects are working with a definite goal in view.

Chart No. VI shows a study of three types of grade schools, and three types of high schools. The chart is constructed on the same principle as that used for the preceding charts.

Some schools in all the groups have instruction above the 50 per cent line for instruction except grade schools of the old type.

Of all the buildings examined, those of two classes stand out as preeminently the best—the one-story grade school and the so-called junior high school.

Why is this so?

It is because these two types have been most carefully studied by our leading superintendents and our best schoolhouse architects.

It is because they are a new type of school building and there are no bad habits of planning these buildings to be overcome. The superintendent and the building committee have an open mind in regard to them, and the architect is allowed to carry out a building not planned on conventional lines with the usual extravagances.

The possibility for improvement in the planning and construction of other types of schools suggests that the time has arrived for the various factors who are interested to get together

over the problems involved. Here in general is the field to be covered. First, it is necessary to determine the best percentages and to adopt minimum standards for the planning and construction of schools.

The superintendent must lay out a definite program; the architect must meet directly and without waste the individual needs of each school—in no case permitting any division to fall below the minimum standard of requirements—and bringing the percentage area for instruction to the highest possible level.

Second. The unification of state regulations must be promoted.

Here the committee asks the influence of the educators. Their intelligent talk must be the instrument thru which public opinion will be advanced not only to demand the best but to refuse to accept extravagant, inefficiently laid out school buildings.

Third. The investigation of building materials with special regard to the substitutes is necessary.

Fourth. The problem of obtaining the greatest possible use from each part of the building must be solved. This fourth problem obviously depends upon the superintendent for its solution, being a problem of administration to be approached after the architect has done his share by providing the good school building for the good school.

To us, this seems a fitting opportunity to lay out a national system to take up this work and make it of practical use for all parts of the country.

We suggest the desirability of a general committee, acting under the Department of School Administration of the N. E. A., which shall be a consulting body which should oversee the work. A sub-committee should be provided in each state to supply information to every town or city which is about to build a school, and help them with advice as to the plans of school buildings.

We suggest that there should be an inspection of school buildings and school building plans under a definite questionnaire and schedule to be prepared by the general committee, and that the results of these inspections should be tabulated and published.

Now the duty before the National Education Association is to educate the country so that it will demand better planned and more economical schoolhouses.

We must consider how we may apply the standards of the National Education Association to future buildings.

We must continue to build schoolhouses and they must not be overcrowded.

We must have minimum standards which architect and superintendent will strive to raise and improve.

This work should be carried on in a spirit of mutual helpfulness. Any superintendent, committee or architect should be able to turn to the committee of the Association and obtain proper information and proper data, the best obtainable from any source.



"FISHING TRIPS"

D. Fred Aungst

"How's this, Mr. Superintendent? As a taxpayer I want to know why you go junketing about the country instead of remaining in the schools with the kids. What are you doing here?" It was on a Pullman car and my male inquisitor had taken the seat facing me. One glance told the story—the mournful, tight-wad taxpayer going about with a gloomy, perpendicular face as tho the bottom of his pocket-book and Wall Street also, had dropped into the public school treasury. I checked a feeling of superiority that threatened to stick up its ugly head and facetiously replied,

"When you ask me the question 'What I'm doing here?' you have hooked a Midgard snake. But to satisfy your curiosity, I may as well tell you I'm on a fishing trip."

"On a fishing trip?" he repeated with a snarl, while sky-piece and gander-neck grew purple at the very thought. "Is that the way you earn your high salary? The board of education must be informed—"

"Mr. Taxpayer," I interrupted, "I *may* be going fishing and I *may* be going to my mother's funeral. In any event you'll be generous enough to squander your own time with such twaddle."

He slunk away growling.

Every town in the United States has its Mr. "Tightwad Taxpayer" ready to insult the superintendent of schools, if he sticks his head outside the schoolhouse door between September first and June thirtieth.

Now, in a figurative sense, I was on a fishing trip. We needed a new teacher to take the place of Miss Lovejoy who fortunately had fallen a victim to Dan Cupid's archery. Last April Miss Lovejoy was reappointed to teach her class another year, but she looked forward anxiously to Christmas day when she would be joined in the bonds of holy wedlock, or holy hemlock, whichever the case might be; and she wisely withheld the glad tidings from us. She needed the money to buy her trousseau. Never mind about her 42 children spattering and splashing about the Well of Knowledge while a tyro-substitute awkwardly ladles out refreshment!

The wedding bells were ringing,
And all her kids were singing.

"Don't cry, Miss Lovejoy, don't cry,
Seven times six makes forty-two.
You love Jim and he loves you.
Goodbye, dear teacher, goodbye!"

I always look upon hunting for teachers as "fishing trips," and I employ tactics somewhat similar to those one uses when out for bass, pickerel, trout, or other game fish. Of course I get an occasional sucker, sunfish, or cat-fish. Suckers are easily gotten rid of. If taken out of their native environment they soon die. The sunfish never stay long, for Dan Cupid catches them. But the catfish! Caesar's ghost! By the time I have discovered my error they are all *cat* and no fish and a devilish nuisance to get off the hook! *

On this trip I felt certain I would not get a catfish or a sucker in Miss Pickford, a little school teacher doing picket duty at her lone outpost under General Education, way up in the mountains of a remote county. Her schoolhouse stood near the shore of a large, beautiful lake where she ministered to several handfuls of

primitive children hungering and thirsting for knowledge. Six months before this I had met her rather unexpectedly while on a real fishing trip. I had left the lake about 10:30 a.m., just the time when bass and pickerel are too glutted even to wink at the choicest kind of bait, and had strolled over to the schoolhouse. It was recess time, so I laid down my split bamboo rod on the dilapidated porch, and began jesting with the children when Miss Pickford came up and spied my rod. Well, she borrowed that rod and straightway called together her 47 cherubs and otherwise, and right there told them all about bamboo, its uses and so on down to its abuses, all of which was supplemental to their morning's geography lesson. Then she returned the rod and up over the rocks, and thru the brush, somewhat after the fashion of a queen-bee with her swarm, teacher and shouting pupils disappeared. Verily, she guarded like a sentinel that lone outpost of the alphabet.

And so I was again on my way up there to have my first impression and opinion verified. I held no illusions about her beauty, for she had a face one would not find on a Madonna canvas but elsewhere in legion; but never mind about that. The schools are not beauty-shops for the debutante wisps—neophytes posing as teachers—headed straight for Hymen's altar. Sam Swan of the board of education and I share opposite views, you see, for he says, "Don't hire any ugly-looking school marms. It doesn't cost more to look at something pretty." Caesar's ghost! Imagine an artist's model doing anything so strenuous as teaching fifty American kids that *c-a-t* spells rough-on-rats.

* * * *

I found Miss Pickford on duty at her lonely outpost of the three R's, but she didn't impress me as belonging to the terrible watchdog or the surly policeman type. The proverbial pin-drop test for order and silence in a schoolroom, would have stood shrieking for attention, so busy was everybody; and, *mirabile dictu*, they were happy! There wasn't a face with its mouth like the horizon on a gloomy day; and those mountain kids worked like beavers as if to disprove the theory of one of my veteran teachers who maintains that "children are naturally lazy and never work unless they are driven to it." However, my veteran teacher, Miss Vinegar, ought to know as she has repeatedly told me she "stands on 34 years' experience." Now, frankly, 34 years is an awfully long time to stand on experience. Even an artist's model can't stand so long; so I rather think Miss Vinegar would better move along on that experience and get rid of that ingrown grouch. We can use her and her experience minus the grouch. Education, kids, and grouchy teachers don't mix.

Old Doctor Hetrich of the board of education says, "There's much in a name, so don't ask us to elect a teacher whose name is against her. Take Miss Vinegar as an example. For more than thirty years our children have been calling her Miss Vinegar and I believe their banter has finally got her to live up to their appellation. I tell you its a terrible job living with other people's brats year in and year out with no liberty except to work overtime, for which the teacher gets no thanks and no pay." I guess the

Doctor ought to know, for he seems like a rough, shaggy human cocoanut containing the fruit of wisdom and the genuine milk of human kindness. Miss Pickford's name should not be against her, and she ought not receive less respect on account of her theatrical namesake. She flitted about in that gloomy mountain hut, called a schoolhouse, as quietly as the shafts of light which came in thru the slit-like windows. Commonplace facts in the dull grind of teaching became beautifully phosphorescent under her instruction. The hard quartz rocks of arithmetic turned her into gold under her Midas touch. The dry bones of history were resurrected from the gray ruins of memory, and the cheerless facts surrounding them were together reincarnated with body and spirit. I saw she was an artist.

I offered Miss Pickford our job and a salary of one hundred dollars above all expenses. . . . Eyes are one of her strong forts and they are regular two hundred and fifty candle power orbs with the current turned on in full. She took one look at me and then naively asked, "How much happiness can you buy for one hundred dollars?" I was flabbergasted for the moment, but two little blue-eyed sprites and their mother back home whispered in my ear and so I said, "My wedding license cost me a dollar and a half and I wouldn't sell it for an allied war loan." I thought Miss Pickford would now be flabbergasted, but she wasn't. Said she, "That's the way father used to talk."

Evidently she was reared in a home that regarded certain things beyond the purchasing power of the almighty dollar. I liked her remark, but I changed my bait. I spoke about the glory and satisfaction one feels when working for the intrinsic values of things. I told her we want the teachers and pupils to get their happiness out of their work, or they will never know what real happiness is; that teachers must never hold out false ideals for their pupils to attain, such as working for "high marks," striving to become beef barons, railroad magnates, oil-kings, bank presidents per se; that we want the children to gather fruit from the tree of knowledge even as a child gathers flowers from the meadows in springtime; finally, that we have no place for any teacher who expects to be a phonograph for the superintendent and his course of study, grinding out "canned education" to the ticking of the program clock.

At last I got Miss Pickford, but after she had met our "committee on instruction" one gentleman, a Mr. Potter, objected to "her general appearance and breath of the pines." Of course I knew her gown was not the latest Paris creation. I also knew that such things are a matter of environment. But when Mr. Potter spoke of "her breath of the pines" I exploded! Well, I think Mr. Potter will not spill the caustic soda again by introducing that subject. We understand one another perfectly now.

Meanwhile Miss Pickford has delivered the goods. She teaches children by means of subjects. Her sterling qualities are a great neutralizer in the Pedagogic Trust, only they do not go far enough.

II.

We had a funeral in our town today. A good woman has gone to her reward, and still lives

School Board Journal

with us. And you should have seen that funeral procession! Our Oldest Inhabitant says it was the longest that ever went to Arlington Cemetery.

But the long procession which followed Mrs. Josephine Stanley to her grave did not impress me very much. It was something else that made me feel I live on the fringe of things, that I rub people's elbow-sleeves but do not dwell in their hearts. I was jealous—jealous of the love, reverence, and devotion which shone on the faces of those people—once her pupils—from all walks and conditions of life. I was jealous of her 43 years of devoted service to her boys and girls, and jealous of the central position she held in their hearts, for I knew I could not get close enough to the children to influence them as this woman had.

A superintendent of schools is a lonely man. Never mind about the several thousand children in his family! He is fortunate if he can call by name half of them. Not only is he lonely, but he is misunderstood and misrepresented. Fond parents and weary teachers promise the boys and girls a trip to his office if they are naughty. He is pictured as the Black Douglas sitting on a throne and thundering in a voice of authority while he flogs the hapless child sent to him. And how often his name is used in vain! "Suffer little children to come unto me," was never meant for a school superintendent. The children are sent to him. If they look upon him as their friend and foster-father, sooner or later his teachers will imagine "he does not support us in matters of discipline" for thus spoke a frosty old principal of her superintendent on this very subject. I have heard unjust and peevish teachers loosen the strings of their vocabulary and pour out streams of lilliputian spite upon their superintendent because he was the ambassador of the children. They chattered, "Hmh! Our superintendent kotows to a bunch of dirty brats. Our highly respectedlicker of juvenal boots will be popular, etc., ad nauseam. Speaking metaphorically, every community has its quota of teachers, (and they are no negligible quantity either,) who expect the superintendent to be their official rubber stamp (approved by the superintendent) as freely on tap as a public drinking fountain. And, do you know that some superintendents are just that! Do you know that some towns have a clique of school marm who, as Bill Young of the board of education says, "are the invisible government leading their superintendent and school board around like good little poodle dogs?" No bevy of spinsters, if left to themselves, ever did get the children's viewpoint. And I have observed that some teachers, if left to themselves, will exalt their own rights above those of the children, every time!

* * * *

But Mrs. Josephine Stanley was no dehumanized being masquerading as a teacher. She was a mother of five children, yes, and a grandmother also, with oceans of mother love and devotion for all children. For years a sixth of her meager salary had paid for milk to nourish the lean, half-starved children of the poor in her school, and we all believed it an act of generosity except our cantankerous school board member, Mr. T. P. Squortlet. Tu'penny Squortlet we called him. Like folks with diminutive souls, he demanded, at a meeting of the board, "an investigation of the tubercular condition of Mrs. Josephine Stanley, a teacher who consumes quantities of milk while on duty." And once again Doc. Hetrich, that substantial cocoanut of human wisdom, sitting at the end of that big table around which were gathered the other austere members of the board, told Squortlet the facts. Once again Doc. said in his quaint, easy, sledge-hammer fashion, "Squortlet, you know damn well what that 'Special Milk Committee' reported on this case two years ago." And once again, Squortlet, as sap-heads elected to public office always do, sought escape in the introduction of another resolution. I copy from the minutes of the board, "Motion by Mr. Squortlet: That Mrs. Josephine Stanley be censured by this board of education for neglect of duty, and that

she be ordered to teach her pupils the fundamentals of knowledge and not to feed their stomachs." But Bill Young knocked the tar out of the resolution. Said he, "Aw, rot! Some people's brains are reached thru their stomachs. Squortlet, are you hungry?"

Dear Slumbering Public, are you sufficiently awake to realize that people with liliputian souls make a great nuisance of themselves when elected to public office?

I thought I had fully appreciated Mrs. Stanley's power for good in our town, but events of the last few days and the reverence in that multitude of people at her funeral have filled me with "that peace which passeth understanding." There was evidence after all of the slowly ripening harvest an unselfish hand did scatter. From the words and deeds of a humble school teacher I too shall take a fresh hold upon life, and the little part of the world in which I move will be better and happier because it was my privilege and good fortune to work with Mrs. Stanley. The first thing I shall now do is to find another of God's unknown servants to take her place.

III.

"Turtels is useful creechurs"—Red Mackale.

I spent two hours this morning trying to get that big pickerel out there near the rocks. He's the wizard of this lake and I swear by the great horn spoon I would have gotten him if a pesky mud turtle hadn't butted in. Sir Pickerel had made one sample strike, had sealed my shiner, and then had let it go to scoop it in on one grand flying finale when up bobbed that mud turtle and scared him away. Yes, "turtels is useful cheechurs" and I can get a heap of comfort out of my experience when I think of Red MacKale's composition on "Turtels," which I had asked the boys to write. Red's was a classic. Here it is:

"Turtels is useful creechurs. They lives in dams and laiks an other places. Turtels keeps a feller thinkin the fish is bitin and they aint and that's fun until you ketch them and then it aint fun fur the turtel wot eats all a fellers worms. Turtels is good to throw stones at an lern a feller to throw a base ball strate over the plate like Chief Bender. Turtels makes manny base ball pitchers and is useful creechurs."

So they are. I'll bet on Red every time. He knows. Now, Dear Slumbering Public, let me tell you about the human turtle you pulled out of the political pond last election day and are keeping for a pet in that municipal aquarium, the board of education.

Quite some time ago I had been making observations of Miss Theda Adair's work, ability, and temperamental fitness for a more responsible position on our staff of teachers. Four years of close scrutiny had convinced me that Miss Adair was the right person to succeed Mrs. Stanley. But Mr. Squortlet thought differently. Altho not a member of the committee on instruction, he stalked into our meeting "to see what would be done about Mrs. Stanley's vacancy," as he wheezed while lighting a cigaret. He became quite ugly when Miss Adair's name was proposed. His objections were on account of *her intolerable religion*. "I'll ventilate the whole thing in the newspapers," he frothed. Altho the committee could have secured her election from the board of education, they were inclined to avoid a quarrel in the town on account of the religion of a teacher. They knew that the ensuing notoriety would slime the teacher's reputation and that of the schools, so they dropped Miss Adair's name, and little Tu'penny Squortlet strutted away feeling mighty in his petty insignificance.

Later in the morning I was just ready to escape from my office and find relief in a room full of children when in walked Trustee Squortlet with a pedantic looking young man who was "seeking the position made vacant by the departure of our much lamented Mrs. Stanley," as Squortlet wheezed in his introduction.

I gave Squortlet's friend one good look and then—! Well! For an anonymous, all round, dyed-in-the-wool political pedagog without even an alias, here I had him! Tony Gillotti and

Red MacKale would turn that school into a roaring circus with their cartoons of this fellow.

* * * *

Squortlet got his friend to talk about himself, his education, experience in schools and in life, etc., all of which is unnecessary in weighing people in the balance of one's judgment. He had a mania for degrees. Almost bankrupted the alphabet! It made me think of the song we sang in parody when I was a boy in district school.

"The A, B, C,
Is pleasant to me,
I'm learning it all the day,
Whenever I look
On the page of the book
I can see but (A. M., Ph. D.)"

Our teacher that time signed his name, "Cornelius Light, A. M., Ph. D.", and of course many a snowdrift bore the irreverent inscription, "Cornelius Light, Masterful Ass, Dam Phool." Poor fellow! May he rest in peace. Yet the fact is, some men need degrees. They obscure the man. But can you imagine A. Lincoln needing one? Just look at it!

A Lincoln, A. M., Ph. D., LL. D.

Before I understood that degrees are mere social certificates I sentenced myself to serve time in several universities where I took courses in chair bottoms and got a lot of psychological dust on my pedagogical gown. Be it said to my credit, however, that I finally jimmied my way out and escaped the Ph. D. lockstep.

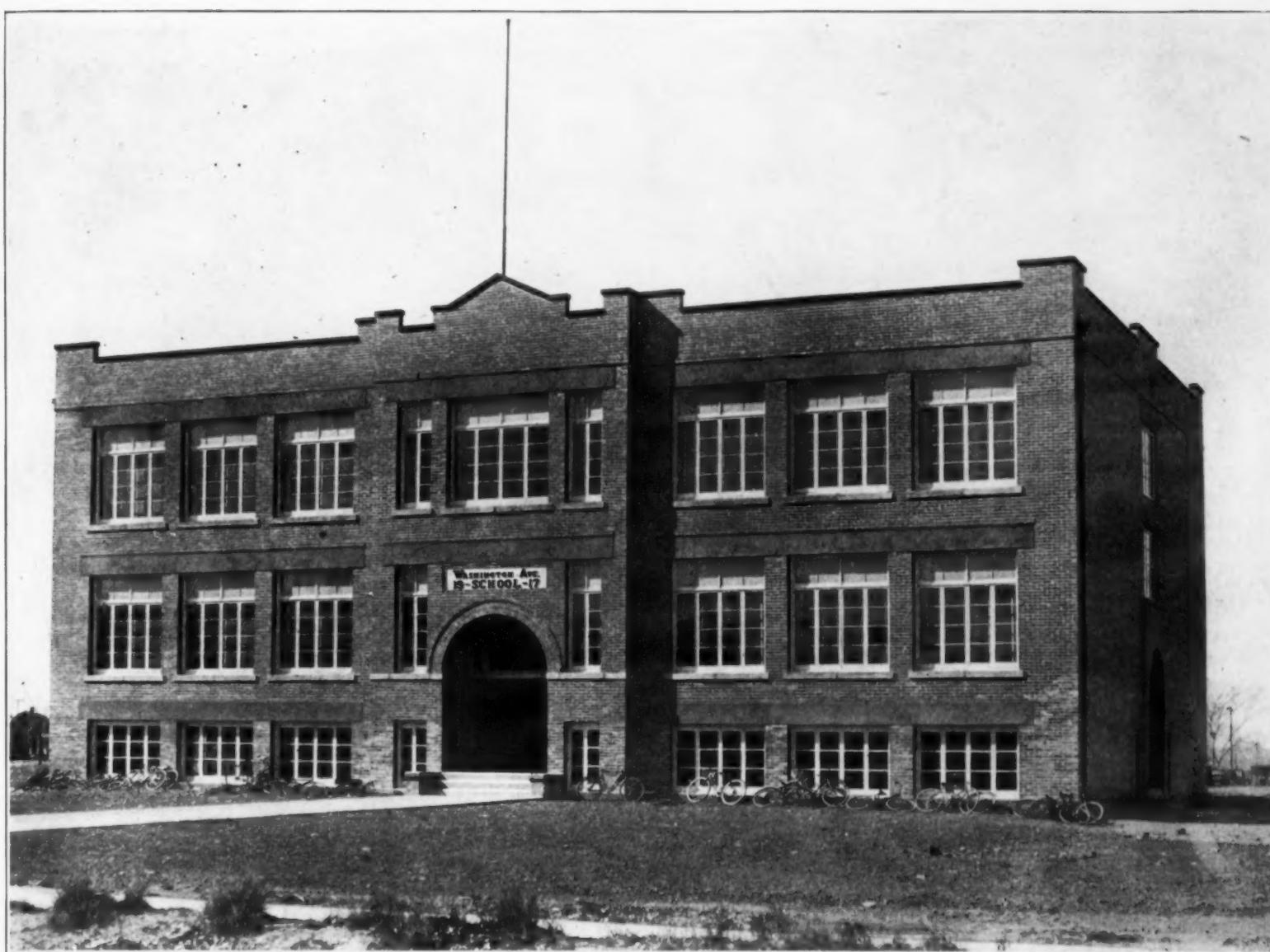
Squortlet's friend was his business partner's son and I saw at once that Squortlet would go to any extreme to get his man elected. I also saw, in his friend, no sucker, sunfish or catfish. He was a *mink*, a blood-sucking mink clothed in the scarlet and purple robes of learning, posing as a teacher, but with the dark insidious traits and the heart of a mink. I shuddered at the fate of the children, if this unctuous protege of a ward heeler were to succeed in getting by me.

Oh, Dear Slumbering Public, wake up and listen! You will find in your schools male and female minks, old and young, sucking the life-stream out of your children. They clothe themselves in garments of efficiency, faultless professional conduct, close attention to duty, and technical subordination to the duly constituted school authorities, while they ply their devilish trade. They smirk and smile upon your children while they stealthily kill initiative, originality, independent thinking, in the name of *discipline* and "we must have system." They are securely nested in your schools, and you alone can smoke them out. When your children show, thruout the course of a year, intellectual asphyxiation in water-tight educational compartments, when they come home day after day hating school, when they give you the impression that their teachers' sympathies are almost wholly theatrical, and when they have not done these things in previous years under other teachers, your children are in the soft, furry, yet deadly grasp of a mink, and that is a pity for your children. You will find the mink in the office of the superintendent and principal and that is a greater pity for your children. And you will find the mink's god-father sitting on your board of education, and that is the greatest pity of all, for the children.

* * * *

In Squortlet's friend I saw the mink securely entrenched for several years, if I could not prevent his election. So I told him with brutal frankness I did not consider him a teacher, and a student of the great book of life. I told him that despite all the psychological hod-carrying he had done for the university in getting his Ph. D. degree, he regarded children as anatomical specimens for metaphysical speculation. I said, "You spoke of the principalship of that school with its eight hundred children as a splendid field for advertising the name of our city. In other words, those children are to be exploited for so base a purpose as advertising our town. Such vulgar and selfish ideals will receive no aid and comfort from me. We want

(Concluded on Page 76)



WASHINGTON AVENUE SCHOOL, ROSWELL, N. M.
C. R. Carr, Architect, Roswell, N. M.

School Reorganization of Roswell, N. M.

Superintendent J. W. Riley

One year ago the public schools of Roswell consisted of a high school with the eighth grade attached as a sort of an appendix, a large central school including all grades except the eighth, one primary school of five grades, one of four grades, one of two grades, and one of one grade. Today the entire school system is organized on the four-four-four plan, consisting of a high school of four years (grades 9 to 12), a grammar school of four years organized on the departmental plan (grades 5 to 8), and five primary schools of four grades each. To provide for this reorganization the old Central building has been thoroly modernized and three new primary buildings including a total of twenty rooms have been added and are now occupied. It is the purpose of this article to relate the story of this remarkable change which has taken place within the short period of twelve months.

Roswell is a city of some eight thousand souls and is located in the Pecos Valley about a hundred miles from the eastern boundary of the state. Some years ago the city experienced a phenomenal growth—a growth so great that the school plant became inadequate for the needs of the schools. But that was prior to the granting of statehood and there were no adequate means under territorial restrictions for relieving congested conditions in the schools. After admission to statehood a number of circumstances, which need not be related here, operated to prevent enlarging the school plant. The situation

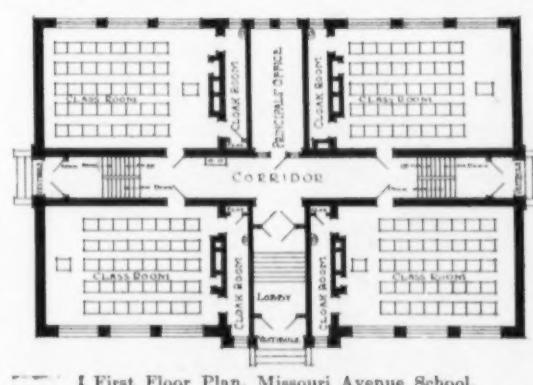
became desperate, it being necessary to crowd into a number of rooms twice as many pupils as these rooms would accommodate and maintain sanitary conditions.

In the spring of 1916 the board of education managed to get into its budget for the following year a building fund of \$5,000. When school opened at the beginning of the present administration, in September, 1916, it was found necessary to occupy four improvised schoolrooms; but even this did not provide accommodations for all who were entitled to attend school. In view of these conditions it was thought best to borrow money and erect at once a small primary building—the money to be repaid when taxes had been collected. This was a technical violation of law but it was thought wise because of the imperative need of more room. Others disagreed how-

ever and on the day that bids for the new building were opened an injunction was served on the board prohibiting them from building. (This part of our narrative is included here only because the outcome may give cheer to some other superintendent who may find himself in like circumstances.)

These were indeed days for serious work. The superintendent was new on the job; he had found a desperate condition; he had tried to relieve it but had failed; he had been laughed at; and he had been told, "I told you so; you can't do that in Roswell." The people were divided on the building proposition; the board was apparently hopelessly deadlocked.

But "the darkest hour is just before dawn." While everything seemed to have gone wrong, there was one fundamental truth that stood out clearly and distinctly. Practically everybody in the city wanted a better school plant; everybody was ready to boost if only the people were assured that they would be given a square deal. The question was how to convince everybody that all was fair and all would be treated alike. To have presented a scheme of reorganization or a program of building to the board as a whole would have been the height of folly. Some other method of procedure had to be followed. Accordingly, a scheme of reorganization was worked out on the four-four-four plan. For the first four grades the city was to be divided into five subdistricts. Each subdistrict was to be



First Floor Plan, Missouri Avenue School.



EAST SIDE SCHOOL, ROSWELL, N. M.
C. R. Carr, Architect, Roswell, N. M.

provided with a building adapted to the needs of small children. All were to be treated alike. (This was the trump card and it took the trick.) The old Central building was to be remodeled, modernized, and was to be used for all grades in the city from fifth to eighth, which were to be organized on the departmental plan. This scheme was presented not to the board as a body, but to each member individually. The first member approached thought the plan over carefully. He had been a superintendent himself and knew how to analyze a problem carefully. Finally he remarked decisively, "That's all right, Riley; you have my support; go ahead." This was encouraging. Each member of the board was interviewed with practically the same result. At the regular meeting of the board in December a formal report was made on the need of enlarging the school plant, and the plan of reorganization was outlined in detail. No action was taken by the board but each member expressed himself as being pleased with the plan of organization.

The following day the report appeared in the two daily papers. A few days later a canvass was made of practically all business houses of the city. Each house was asked for a brief statement of its opinion of the plan recommended. Every house interviewed stood firmly for the plan. Each made a statement of approval. These statements were published in the daily papers. The editors of these papers lined up for the issue. At the board meeting a month later, a second report was made pointing specifically what would be needed for each subdistrict and what it would probably cost. Again the members expressed approval, but took no action. This second report was published the following day and again the editors and others came out decisively for the plan. The campaign was kept up thru the papers during the following month. At the regular meeting in February the board was ready to act on the recommendation of the superintendent, but as two members were absent it was held best to postpone action until all members were present. On February 20, a special meeting was called at which a resolution was introduced calling on the electorate to vote a bond issue of \$100,000. Every member of the board voted for the resolution.

It was decided to hold the election early in April. During the time preceding the election various methods were used to carry a strong vote for the bond issue. Perhaps the most unique was that managed by the high school students who wore cards bearing the statement, "You vote the bonds; we will redeem them." The editors of the daily papers and other public spirited citizens kept the issue almost daily before the voters, so that when the votes were counted on election day it was no great surprise to find a vote of 903 for the issue with only 102 opposing it.

The bonds were sold at par some six weeks later. The board was now ready to begin work in reorganizing the schools and erecting the new buildings.

One of the problems which it was thought most difficult of solution was that of changing the sub-district boundaries. The city had previously been divided into four sub-districts but since the old schoolhouses were poorly located the old district boundaries were ill adapted to new buildings properly located. For various reasons the boundaries were made to appear as immovable as the Chinese wall. To have attempted to make any change in these boundaries in "open meeting" would have resulted in utter failure. Again the personal canvass method was employed. Every home to be affected by the proposed changes was interviewed, and in every case, except two, parents were not only willing but gladly welcomed the change. The bound-

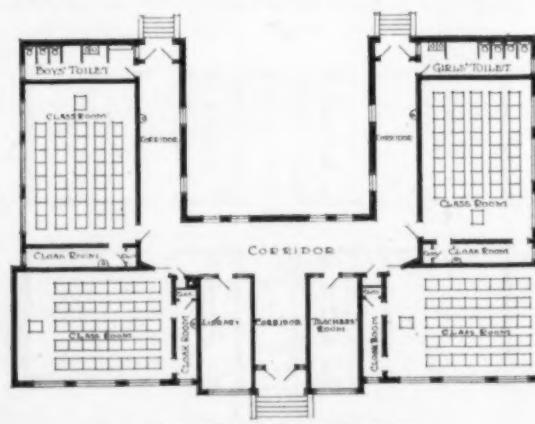
aries were changed in four places without causing the least friction.

In the matter of locating sites for the new buildings the board was fortunate in being able to secure property in almost exactly the center of each of the three sub-districts in which a building was to be erected.

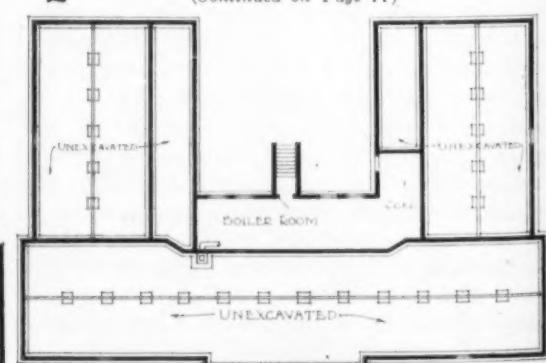
In planning new school buildings there is probably no question of greater importance than that of securing a good architect. No superintendent is sufficiently familiar with the science of school planning to direct the construction of a school building. It is also true that no architect is sufficiently familiar with the work of a teacher to be able to plan a building well without the aid of the superintendent. To secure the best results the architect and the superintendent should work together during the entire period of construction. In this instance the board employed a local architect who was glad to co-operate in every way with the superintendent of schools.

In planning the three new buildings one thing that was kept constantly in mind was the possible future growth of the school population. To this end the unit plan of construction was adopted. The two brick buildings were constructed on exactly the same plan, except that the one contains but one unit of the completed building while the other has two units. The one-unit building contains six classrooms, two toilet rooms, and an office. The two-unit building contains ten classrooms, two toilet rooms,

(Continued on Page 77)



Floor Plan, East Side School.



Foundation Plan, East Side School.

PLANNING THE WAR-TIME SCHOOLHOUSE

III. The 6-Room School

William Draper Brinckloe

It surely was a problem—that little six-room school in southern Delaware! The vicious, haphazard "district" system still exists in that state; practically every cent for building a new schoolhouse had to be raised by bonding the district, so, of course, the usual thing happened. The local school board went to the legislature, asking authority to bond the village for \$12,000, "to erect and equip a high school"—knowing all the time that this was absurdly insufficient. But, with visions of protesting delegations of fierce,



Fig. 1.

long-winded, long-bearded taxpayers, the board dared not increase the estimate; and the bill passed—"We want six classrooms, assembly room, principal's office, quarters for domestic science and manual training; that's all, except toilets, boiler room, septic tank, and so forth," said the building committee to me, cheerfully, "and we have just \$12,000 to do it all."

Now, I set this forth by way of apology and explanation; for I realize fully that the Greenwood high school (fig. 1) isn't an ideal building by any means. Still, it conforms to the most modern school standards, in sanitation, safety, and lighting; and so I'll show it here. There must be many boards whose funds are fearfully scanty, these war-time days. Such folk will welcome any help in stretching their cloth to make some sort of suitable coat, even tho the skirts be a bit short! Naturally, \$12,000 isn't enough nowadays; but I think \$16,000 would do it, with rigid economy.

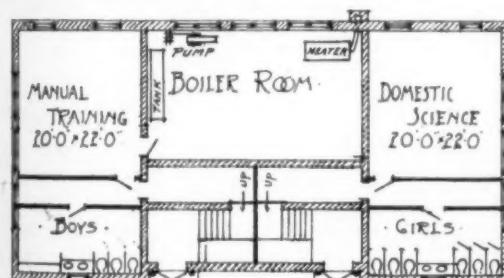


Fig. 2.

The building is of brick, with concrete trimmings, the basement sets $3\frac{1}{2}$ feet in the ground, and is floored with cement. Here (fig. 2) are domestic science and manual training rooms, toilets for both sexes, with a large room for heater and water system. A two-horse-power gasoline engine of a type approved by the in-

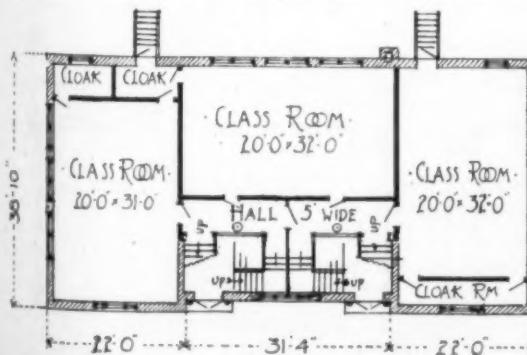


Fig. 3.

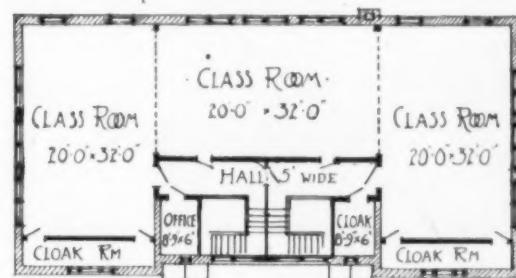


Fig. 4.

surance folk for installation in a basement, does the pumping; a pneumatic pressure-tank stores the water. For schools, I consider this better than an open tank in the attic; the water is cooler for drinking, it cannot be polluted by drowned mice, etc., and runs much less risk of freezing. Of course, a driven well was put down, and the water tested by the state board of health.

The toilets for the two sexes are reached by separate stairways, running down from the boys' and girls' entrances; there is no connection between the two parts of the basement. As to the number of fixtures, I have followed the rules laid down by Mr. J. J. Cosgrove, in his book on "School Sanitation." He says, "One water closet is required for each 50 male students or fraction thereof, and two urinals for the same number. For girls, at least two water closets should be

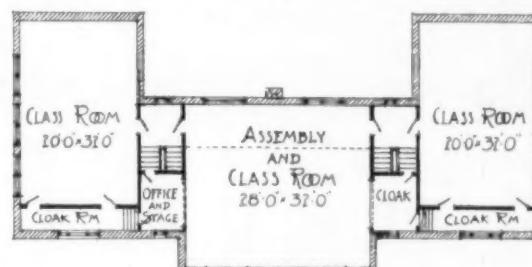


Fig. 5.

provided for the same number." Of course, this depends somewhat on circumstances; primary classes need a slightly larger number, as do "consolidated" schools where most of the children are transported some little distance from their homes. A few years ago, it was the custom to put special "ranges" or self-flushing closets in schools; but nowadays, regular residence fixtures are largely specified. The local plumber generally carries the spare parts for any repairs; and the notion that the children "won't know how to operate the ordinary fixtures" has proven a myth. Girls' closets are separated by parti-

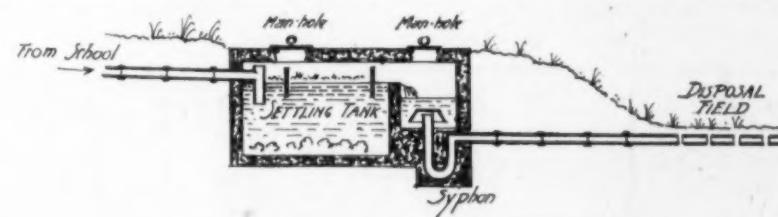


Fig. 6.

tions resting on metal legs; each compartment has a door. The urinal is an enameled trough, set amply low for the smaller boys, and provided with slate back, ends, and floor-slab. Cement floors under urinals soon become foul, unless protected by slate, marble, or tile.

The sewage from a village school of this type generally must be taken care of by a septic tank (fig. 6); a water-tight concrete box, divided into two unequal compartments by a concrete dam. The raw sewage flows into the first compartment, or "settling tank"; here the solid matters drop to the bottom, but gradually break up

and liquefy. A thick scum or mat of bacteria forms on top of the water—and helps wonderfully in some curious way, to dissolve the solids at the bottom. Therefore, wooden boards or "baffle plates" are set crossways of the tank, as you see, to keep the mat from drifting away. The liquid sewage dribbles over the concrete dam, into the second compartment or syphon chamber; when this chamber gets full, the cast iron syphon at the bottom automatically empties

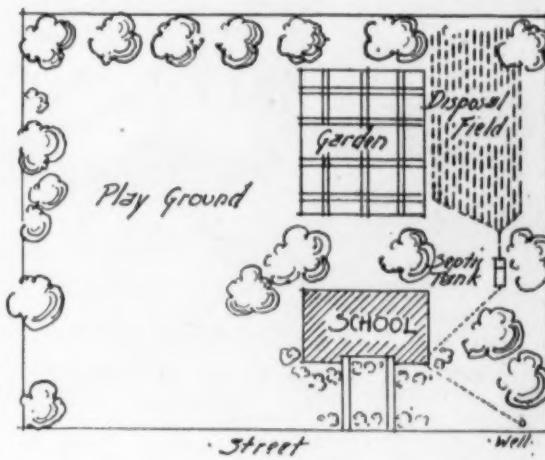


Fig. 7.

it at one gush. From the syphon, the sewage shoots out into a "disposal field" (fig. 7); a network of ordinary porous drain-tile, laid not more than six or eight inches below the surface of the ground. Now, nature has provided vast swarms of beneficent bacteria, whose business it is to eat up and destroy the disease-carrying germs (*bacillus coli*) that lurk in sewage; these useful bacteria thrive in the top-soil, provided it does not become water-logged. So, the purpose of the syphon is to give the disposal-field a chance to dry out between discharges; an interval of at least six hours is necessary. In that time a properly laid field will perfectly purify the sewage. The old-fashioned cesspool does not purify the sewage at all; the beneficent bacteria, as I have explained, cannot exist in wet, soggy soil, and the cesspool becomes a very nursery of disease germs.

The cost of a disposal-system for a six-room school will be something like \$500; and, by the way, a fall of at least four feet is necessary. If that much drop cannot be had naturally, the septic-tank can be set above ground, and banked up with the cellar-earth; in that case, the toilets will have to be taken out of the basement, and

placed in the office and cloak room opening off the hall (fig. 4).

A septic tank should always be designed by a sanitary engineer or an experienced architect, and the plans submitted to the state board of health for approval. A disposal system that does not dispose, is very much worse than useless! However, there are a number of reputable concerns that make a business of designing and installing small disposal-plants.

Figures 3 and 4 show the main and second floors of the Greenwood School; the assembly room is made by raising two rolling partitions,

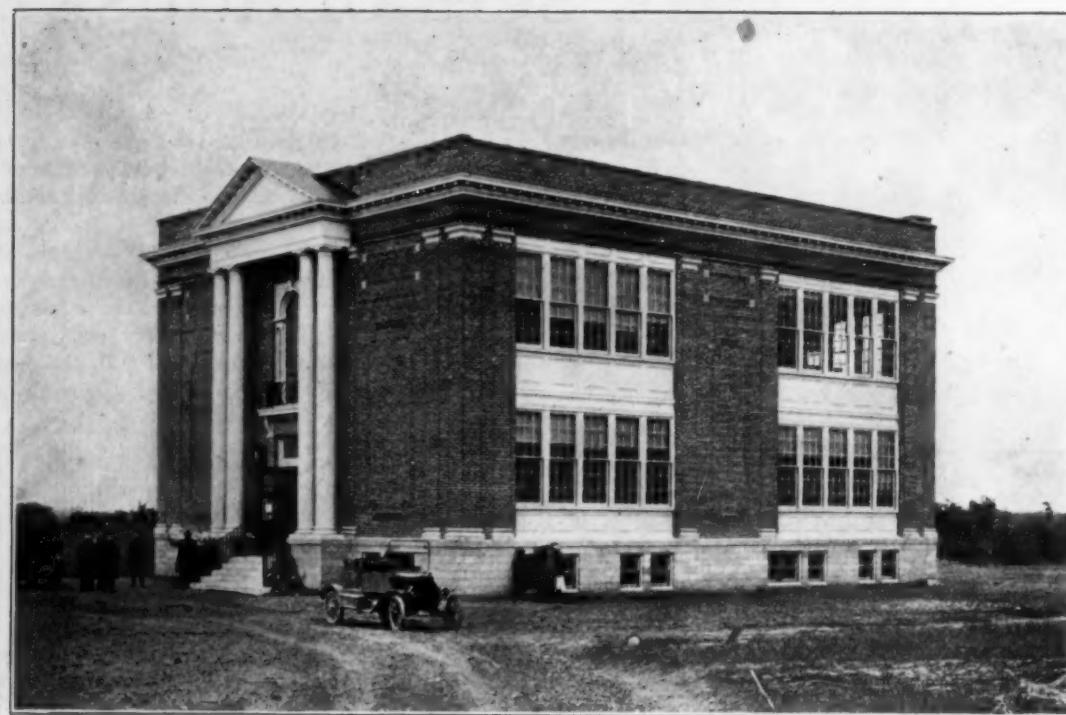


Fig. 8. NEW SCHOOL BUILDING, BURNT HILLS, N. Y.

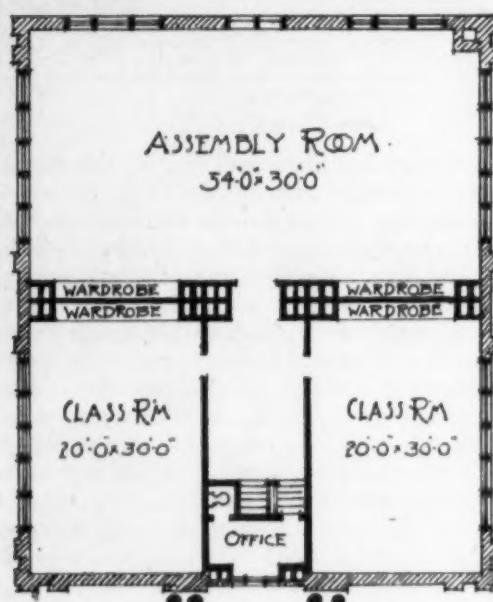


Fig. 11.

and thus throwing together the three classrooms. This is a makeshift; but it is better than no assembly at all. The stairway is double, separated by a concrete partition; in case of fire, one side will always be free. There is sufficient space above the stairway to work in a very good library or teachers' room; tho this was not done in the original building. The windows at the ends of the classrooms are merely meant for ventilation, and are closely curtained during sessions. The building faces south; if it had

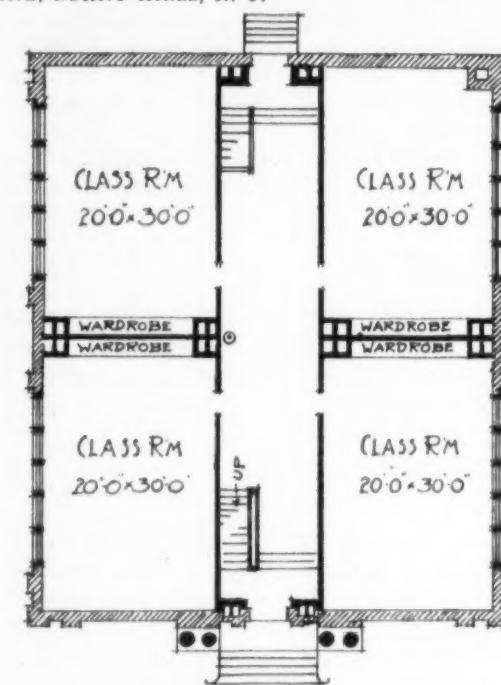


Fig. 10.

faced north, we would have revised the plan as in fig 5, so that no classroom would have its windows toward the direct glare of the sun. Under no circumstances whatever should any study or recitation-room face directly south; the all-day glare of the sun may be good for the tissues, but it's ruinous to the eyesight! A northern exposure is permissible, tho not ideal; the best arrangement is east-and-west, like the

school at Burnt Hills, N. Y. (figures 8-9-10-11.) A mighty well-planned building, this; tho I would advise putting fire-partitions across the center of the halls, and running the girls' stairway up to the second floor. Extending the hall about 10 feet would permit this. I understand the cost of the school was about \$25,000 complete.

So much for two-story structures; now, let's consider the bungalow type. The Lincoln primary school at Petaluma, Cal., (figures 12, 13) is an excellent example; tho I would omit the main entrance, and use the space for a principal's room. Two entrances are enough for any school; the third is a pure luxury, and should be cut out these war-time days.

A still better schoolhouse—so far as planning goes—is the New Richmond, Wis., school (figures 14-15). The corridors, you'll notice, form galleries to the auditorium and gymnasium; a very clever and economical scheme, that! And more rooms can be coupled on, beyond the toilets, by merely extending the corridors; you can make as long a train as the traffic demands.

But here, too, I criticise the useless third entrance; by cutting it out, we can get sufficient space to make quarters for manual training and

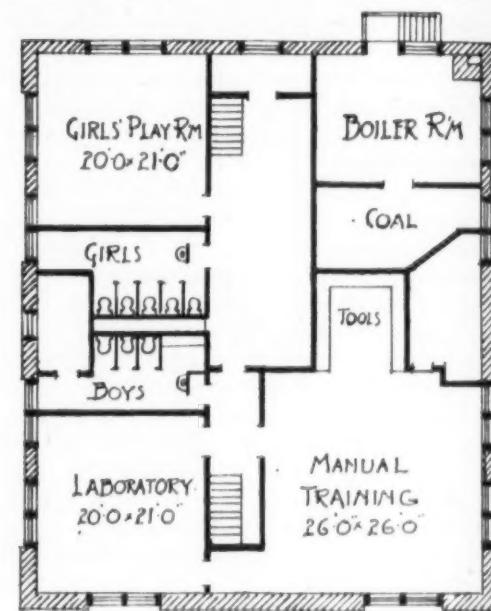
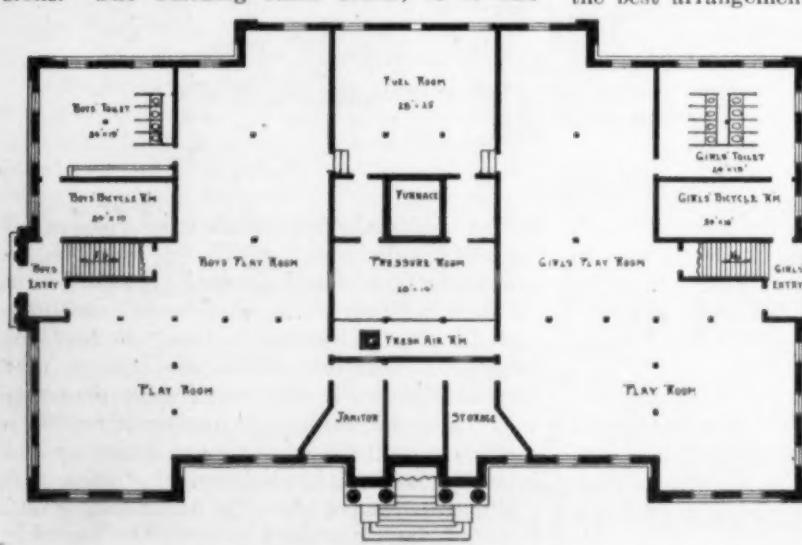
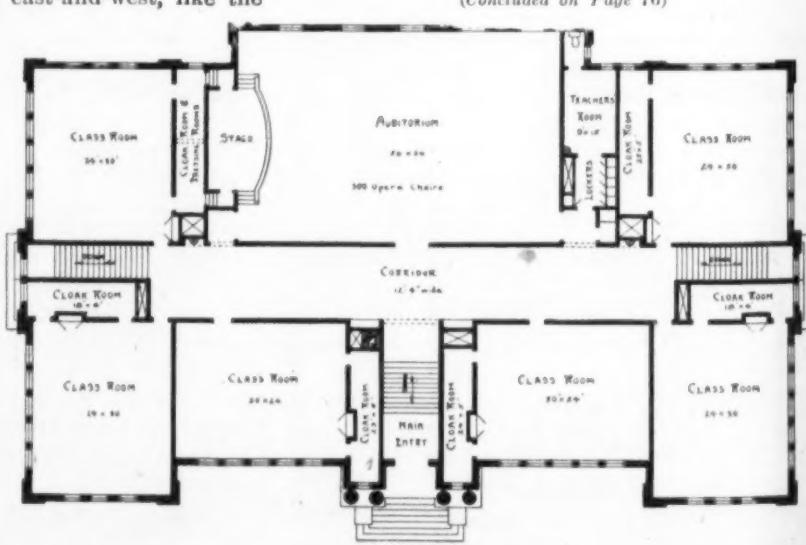
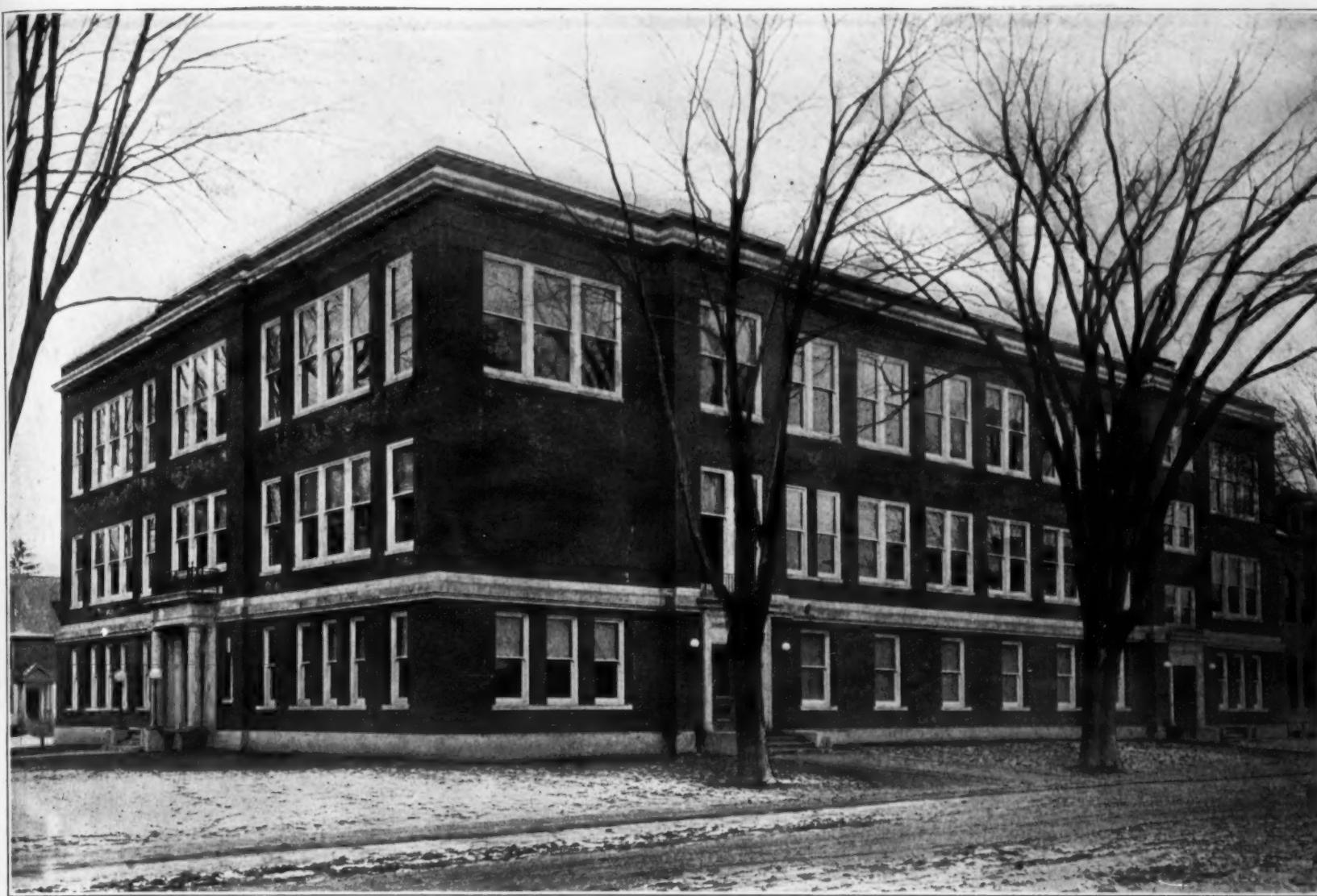


Fig. 9.

domestic science. The manual training room, for example might be set half way in the ground, with the girls' workroom above it; there is ample height. Then, the toilets, at the other end of the building, could be lowered or raised in the same way, to give space for the teachers' and supply rooms. By the way, there are too many water-closets in the boys' toilet. And there is no need of carrying up the brick walls, parapet-

(Concluded on Page 76)

Fig. 12.
Basement Plan, Lincoln Primary School, Petaluma, Cal.Fig. 13.
Main Floor Plan, Lincoln Primary School, Petaluma, Cal.



NEW HIGH SCHOOL, EAST AURORA, N.Y.
Harris and Merritt, Architects, Buffalo, N.Y.

The New East Aurora, N.Y., High School

The new High School building at East Aurora, N.Y., is designed along broad, simple lines and both the exterior and interior give an impression of service and stability.

A limited appropriation made it necessary to study every detail of plan and construction most carefully to the end that all "frills and furbelows" be eliminated and full value returned for each dollar invested.

The total cost, including the heating and ventilating of a present eight-room building in the rear of the new building, was somewhat under fifteen cents per cubic foot based on the cubicity of the new building.

The building is fireproof thruout and only the best and most serviceable materials entered into the construction.

Special attention was given to the lighting of each room, both natural and artificial. Each room has a window area in excess of the amount required by the state code and all glass is polished plate in large panes; all small muntins, which are often used for exterior effects only, are eliminated.

The new building has a frontage of 94 feet on Main Street and 144 feet on Grove Street with connecting corridors to an existing school building which was entirely remodeled and heated and ventilated from the central heating and ventilating plant located in the new building. There are two entrances from Main Street and three entrances on the Grove Street side.

In the basement is located the gymnasium, 40 by 66 feet with locker rooms, shower baths and drying rooms in connection. There are outside entrances direct to the shower rooms for the athletic teams. The height of the gymnasium is twenty feet in the clear under the steel girders. Along one side of the gymnasium

runs a balcony which opens off the first floor corridor. In the basement is also located the heating and ventilating plant with a large coal storage room, a room for ashes with an electric ash hoist.

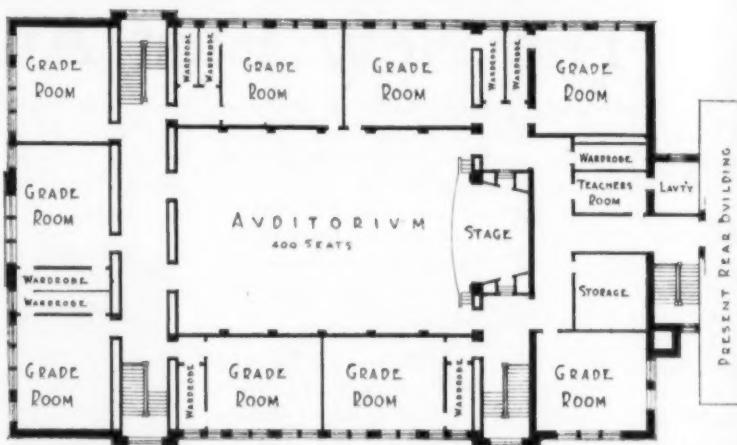
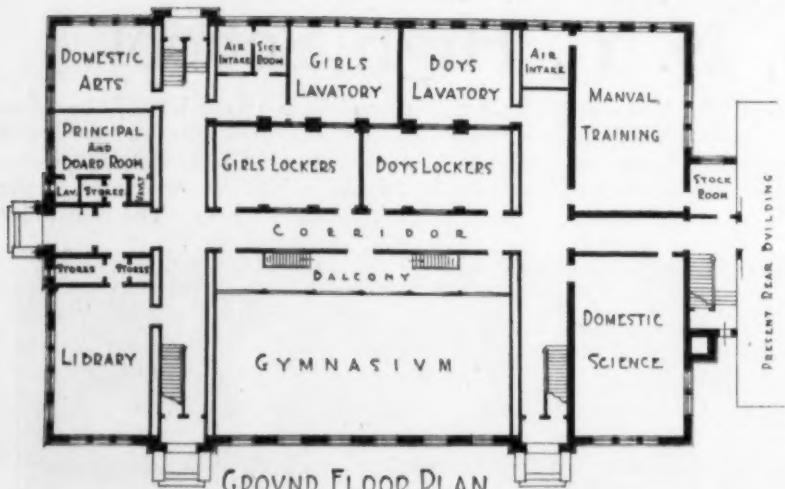
On the ground floor at the left of the main entrance, are the principal's office and the board of education room, with lavatory, coat room, storage closet and vault. At the right is the library with its storage rooms. The remainder



Gymnasium, New High School, East Aurora, N.Y.

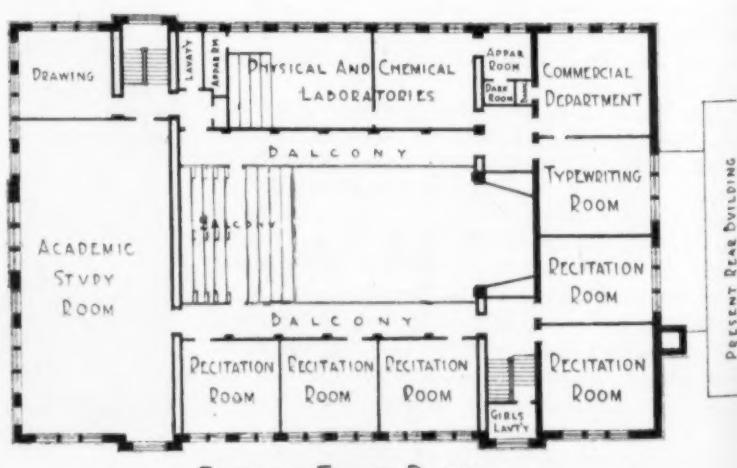
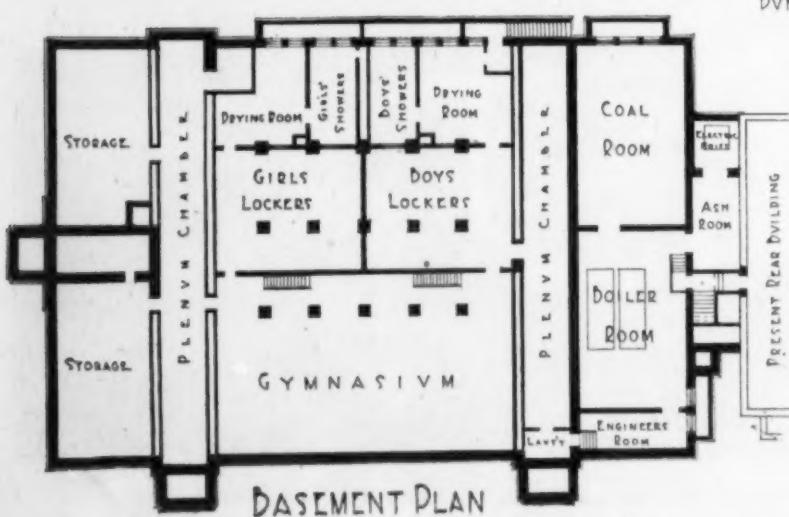


AUDITORIUM, NEW HIGH SCHOOL, EAST AURORA.



EAST AURORA HIGH SCHOOL

HARRIS & MERRITT ARCHTS
BUFFALO N.Y.



of the ground floor is devoted to the upper portion of the gymnasium, general lavatories and the general locker rooms for the academic department and the domestic arts, science and manual training department.

The first floor which is called the grade-room floor, contains the main floor of the auditorium, with seats for 600 persons. Around the auditorium are grouped the nine grade rooms to accommodate 350 pupils. Each grade room has a wardrobe in connection. This floor also contains a rest room and locker room for the teachers, with lavatory adjoining.

The second floor is devoted entirely to the academic department. The academic study hall seats 170 pupils. The physical and chemical laboratories occupy the entire center west portion of this floor. There is also a drawing room, the commercial department and six recitation rooms.

The exterior of the building is dark red tapestry brick and the trim light gray terra cotta.

In the interior all corridors and stairways are wainscoted to a height of eight feet with a hard-pressed buff brick. The corridor floors are dark red composition, the grade room floors are maple. All rooms are electrically lighted with the latest improved fixtures.

All rooms have connections to an electric vacuum-cleaning system. There is an inter-communicating telephone system throughout the building, and all rooms are provided with secondary clocks and program bells which are controlled by the master clock in the principal's office.

The heating system is low pressure steam with two down-draft smokeless boilers. There is direct radiation in all rooms. The ventilating system is the blast system and tempered fresh air is delivered to the rooms in proper volume by electric motor driven fans. All locker rooms, lavatories and chemical laboratories have additional ventilation by exhaust fans.

The general contract for the building amounted to \$95,125 and the heating and ventilation cost \$16,676. The plumbing and gas fitting contract was \$6,609 and the sum of \$6,590 was paid for miscellaneous, including architect's fees. Alterations and improvements in the old schoolhouse amounted to \$5,000 of the above figures so that the new structure did not exceed in cost \$120,000. The contracts were let in March, 1916, which accounts for the very low cost of 14.3 cents per cubic foot.

The bond issue of \$125,000 was sold at a premium of \$6,500 and the excess provided movable furniture, laboratory equipment, opera chairs, stage curtain, etc.

The building was planned and the construction was supervised by Messrs. Harris and Merritt, Architects, Buffalo. The firm has a long list of successful schools to its credit in Western New York State.

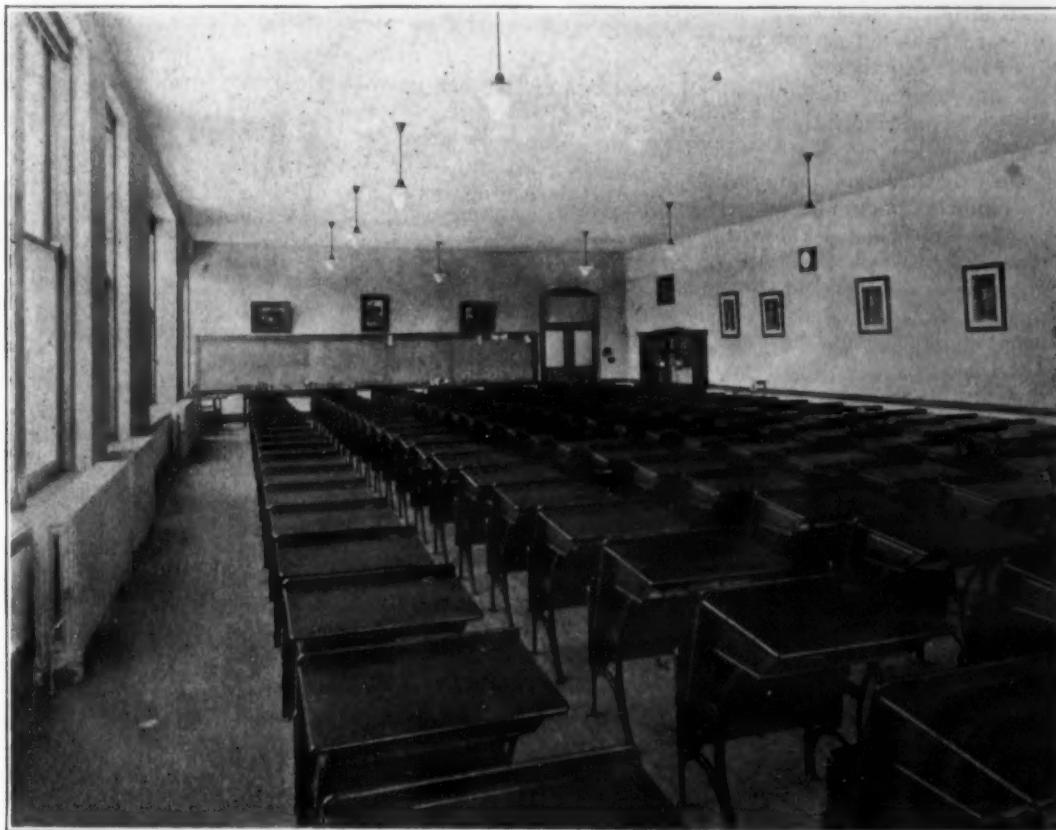
THE VALUE OF A PERMANENT, CONTINUOUS SCHOOL CENSUS.

At the recent meeting of the Department of Superintendence of the N. E. A., Director John W. Davis of the Bureau of Attendance, Department of Education, of New York City, made an address on "The Need of a Continuing Census of Children of School Age." In the course of his talk Director Davis maintained that the only way of seeing that every child shall receive an education is by following him up from the time he enters school until he has passed into man's estate.

"The necessity for a permanent school census, as the only adequate means by which the identity of each future member of the community can be established and maintained, is slowly coming to be recognized," continued Mr. Davis. "New York State has been the pioneer in the line, and since its first legislation was enacted the state has stood unconditionally for its extension. In season and out of season Assemblyman James D. Sullivan has preached the necessity of the permanent school census, and in the



Auditorium, looking toward Rear Balcony, New High School, East Aurora.



Academic Study Room, New High School, East Aurora, N. Y.

past year he has had the satisfaction of seeing his proposals enacted into law for every city of the state, in each of which at the present time a permanent school census has been installed. Something over two years ago Massachusetts also adopted a system of registration for minors, setting an example for the other commonwealths to follow, and I urge upon you the need of exercising your influence to secure the adoption of an adequate measure for the registration of minors in your own state.

"There is, however, a more important phase of this follow-up work of continuing identification of the individual which cannot be accomplished by legislation alone—namely, the notification of the removal of children from one state to another, and from one community of a state to another within the same state. In our present circumstances there is a transfer of population

without precedent going on, the circumstances of which are peculiarly favorable to the loss of children in great numbers from the processes of education, and I advocate the adoption of a universal system of transfer between the different states of the Union and the different communities of the individual states.

"I also urge upon your attention the importance of continuous follow-up records of the employments and occupations of children thru minority as the fundamental basis for testing the results of instruction with the character and amount of instruction given the child while at school.

"We meet from the businessman the charge that the children of our schools are inefficient and unable to meet even the modest requirements of those who first employ them. We have

(Concluded on Page 80)



THE AMERICAN
School Board Journal
DEVOTED TO
Legislative and Executive School Officials
WILLIAM C. BRUCE, Editor

EDITORIAL

"BUY NOW."

The government is urging people to place orders early for coal. Flour and substitutes are becoming scarcer and scarcer. Prices are going up and up. All commodities are showing tendencies to rise more and more with every day and even then the problem is to get the goods, let alone the terrific prices to which we are gradually becoming accustomed.

With this as a national and international problem the annual mandate to "buy school goods early" should hardly be necessary. Every school board member who has any experience in buying for his own business should give the superintendents of schools and the secretaries of school boards who act as purchasing agents the benefit of their experience.

With the demands made upon all forms of industry it is not likely there will this year be an over-production of school goods. Manufacturers have been called in many ways to contribute factories, men and money to the winning of the war. Then the shortage of labor has not improved the situation and of course the draft has cut in seriously into the production of many plants.

School officials are here urged to correspond promptly with their regular source of supply with reference to their immediate needs for school goods. Price should not be the consideration this year, but the possibility of service. Never in the history of the country was this so vital or necessary as today.

The goods should all be dated ahead for shipment by 60 to 90 days. Railroad facilities are being cramped very badly by the demands of the war. East going freight is particularly bad, but all manufacturers have trouble getting cars because of the many priorities on the shipment of war necessities.

In years gone by, we have urged school boards and school officials to "buy early. Never in the history of the country was this so necessary as now. Schools should open on time September 1, equipped with at least the necessities. It is vital therefore that orders be placed promptly and deliveries requested "as soon as possible."

A SUGGESTION TO SCHOOL BOARDS.

The annual meeting of the Department of School Administration of the National Education Association will be held in Pittsburgh, July 2 and 3. The sessions of the Department promise to be more suggestive and timely than they have been in many years.

The first session of the Department will include addresses by leaders of national Education and will be limited largely to general problems of administration. Dr. W. S. Deffenbaugh of the United States Bureau of Education will discuss "Recent Growth in City School Administration." Dr. George W. Gerwig of Pittsburgh will present "War Policies for Schools." "The State and School Administration" will be taken up by Dr. Thomas E. Finegan of Albany,

School Board Journal

N. Y. "Americanization—A War-Time Duty of the Schools" will be discussed by Dr. J. George Becht of Pennsylvania, and a statement of the Government's war-time policy will be made by Dr. P. P. Claxton.

The second session of the Department on Wednesday morning will be devoted entirely to the problems of school finance as complicated thru the war and to a discussion of the relations of school boards and teachers during the war. The speakers at this session will include Dr. Joseph S. Kornfeld of Columbus, O., Mr. Joseph S. Storer of Buffalo, N. Y., Mr. Wilson C. Price, Esq., of Jamestown, N. Y., Mr. Marion E. Griswold of Erie, Pa., and other prominent school board members.

On Wednesday noon the Department will tender a luncheon to Mrs. Mary D. Bradford of the N. E. A. A round table of the Department on Wednesday afternoon will be devoted to a discussion of the "Standardization of School Architecture." The round table will be headed by Mr. Frank Irving Cooper of Boston and a report will be made on the work of the Committee. The Committee has measured and rated more than two hundred school buildings during the past year and it is expected that its report will set a new standard of efficiency in schoolhouse planning and construction. School boards can do no better than send several delegates to the meetings of the Department.

TREATING SUPERINTENDENTS FAIRLY.

The year 1918 will be remembered in school circles as unusually quiet in the matter of re-electing superintendents and principals. The demands for men in every branch of industry and trade and the calls of the government for assistance in every department of the civil as well as the military and naval services have not been without effect on boards of education. Salaries, too, have been going up at a gratifying rate.

It is a fact that there has been such an abundance of splendid superintendency timber in years past that board members have not felt the necessity of trying to hold even very successful men. The very opposite has been the case. Every politically inclined and personally ambitious citizen and board member has felt it his privilege to harass the superintendent, to oppose him and to let it be known that the vote of the member would be cast against the former's re-election because of any fancied wrong or any minor disagreement.

This situation is changing with the times and must be changed radically during the present crisis if we are to hold our superintendents in their positions and are to keep them from considering other forms of satisfactory occupation. Salaries too must be increased and there must be a general improvement in the conditions of work thru greater freedom of action and corresponding authority. In a real way all these changes will be to the great benefit of the schools for they will place administration on a more scientific basis and will result in greater efficiency, less waste motion and more economy.

THE COAL PROBLEM.

The problem of keeping the schools warm during the winter of 1918-19 is likely to be more serious than it was during the past winter and unless school authorities act with great promptness and energy, it is more than probable that many schools will be seriously embarrassed. Reports from the anthracite region indicate that production has increased from two to five per cent only, while the demand from necessary industrial users and from domestic users in the anthracite region has jumped from fifteen to twenty per cent or more. The situation in the bituminous districts is more promising but not altogether favorable.

School boards and their purchasing agents are earnestly advised to place their fuel orders immediately and to take every possible step to ensure a full year's supply. In most states the schools will be given preference by the fuel administrators and help should be sought from this source. Where purchases can be made at the mines, this method of eliminating delays should be utilized. Local deliveries should be facilitated and outdoor storage should be provided where indoor bins are not adequate. It is not only wise economy to overhaul grates and to put heating plants in condition for the most economical operation with the best available fuel, but janitors and firemen should be instructed in proper stoking methods. It will not be amiss to concentrate summer repairs on those items which will make for fuel conservation.

The fuel problem deserves careful attention for two main reasons. First, the education of the children will certainly suffer if it is not solved and we shall defeat at home our fight for making the world safe for democracy. In the second place, enormous losses will result from the freezing up of school plants if they must be shut down during any considerable cold spell. New York City alone lost several hundreds of thousands of dollars in January last thru the closing of school plants and the total for the Atlantic and Middle West States ran well into the millions.

THE POINT OF CONTACT.

A not uncommon attitude of mind among some superintendents is based on the idea that the secretary of the board and its members know and should express no opinion after the superintendent has voiced his recommendation on an educational problem. A similar feeling exists with secretaries and many members of boards concerning the superintendent's ability to judge of the business matters of the school districts. It is not uncommon to hear the charge that no superintendent knows anything about building construction or accounting systems or the purchase of supplies.

Both positions are untenable and unfair, because they are evidently based on half truths and in many communities are wholly untrue. There are many secretaries who have some knowledge of educational methods and principles and who can give a trustworthy lay opinion. Most superintendents have some knowledge of business affairs and of the business methods that are applicable to school affairs. But no good superintendent would dictate the details of the routine of a secretary's office, and vice versa no live secretary or business manager will concern himself with the pedagogical matters that are strictly the function of the educational head of the school system. There are duties which lap over into the field of both the superintendent and the secretary, which have business and educational elements and which require co-ordinate action. Here in this both-men's land there is need first of all for recognition of the prime purposes of the schools—the welfare of the children—and secondly of the supremacy of the superintendent as the chief school executive. No less, however, is there necessity for the acceptance of mutual counsel and confidence—of cooperation. Here the ultimate judge must be the school board and this body again must look first to the welfare of the community's future citizens.

There is no cause for an attitude of antagonism on the part of either the educational or the business heads of the schools. The latter are rapidly professionalizing their calling just as the former have done. The movement is one of the most worthy that is current in American administration. It will be furthered best, we think, not by insistence upon rights and prerogatives but by constant, intelligent, efficient

service. School boards and the public as well as superintendents will recognize business managers and secretaries when the latter have made themselves indispensable.

MR. ETTINGER ELECTED.

Mingled satisfaction and disappointment are expressed in New York circles over the election of Dr. William L. Ettinger as superintendent of schools to complete the unexpired term of Dr. Maxwell. The opponents of Dr. Ettinger and the political enemies of Mayor Hylan see in the selection of the new superintendent the hand of the Tammany head of the city government and the dictation of school policies from the City Hall. The fact that President Somers of the board of education and one other member did not vote for the new incumbent gives color to the statement that the selection of the board was not uninfluenced by the city administration.

It should be said that Dr. Ettinger was the strongest of the candidates within the New York City system, and it may be questioned whether any outsider was as strong as he as an educator and general administrator. He represents the best elements within the schools who are breaking away from traditional organization and age-worn methods, and he better than any other New Yorker has been able to harmonize the people of the city with the work-study-play scheme of school organization. He has a pleasing as well as forceful personality and his tact and organizing ability are unquestioned.

Dr. Ettinger worked his way up to the post of associate superintendent from a position as teacher in public schools, 29, 27 and 2, Manhattan. He holds the degree of bachelor of arts from Manhattan College (1881) and of doctor of medicine from the University Medical College, now the University and Bellevue Medical College (1891).

Dr. Ettinger assumes control of the New York City schools at the most promising period in their history. The new, small board of education is progressive and has in the few months of its existence shown that its members have an appreciation of their true function. They have attacked with promptness and decision the vast volume of business handed down to them by the old board and have given evidence of good judgment and common sense. The supervisory and administrative staffs of the schools are as strong as can be found in any American city and the teaching corps is able and not more restless than can be expected under present economic conditions. The vast reforms which have been agitated during the past decade have been well begun and Dr. Ettinger can show his finesse as a manager by making them a part of the large smooth-working machinery of the schools. All in all he is to be congratulated upon his opportunity. May he fully succeed.

MEETING THE TEACHER SHORTAGE.

Three lines of endeavor seem to be essential for overcoming the teacher shortage which exists throughout the United States. The first of these is the retention of teachers now employed, under conditions of work which will encourage them to remain and to render complete service. The second line is in the direction of getting into the service every available person who has training for teaching or who can be prepared within a brief time to undertake classroom labors. In this connection it will be necessary for boards of education to seek teachers who are now engaged in other occupations, who have retired because of marriage, and to bring into the schools also women of normal school or college education who have entered other lines of work.

It will be well to remember at this time that the present shortage of teachers will not be

obviated by filling all the available positions in September. It will rather be necessary to look forward to the school year which begins in September, 1919. Just here school boards can be of service by establishing normal training classes in high schools, and by insisting that principals urge graduates of the school year just closed to enter normal and teacher-training classes during the coming fall and winter. Unless our schools are to suffer as the English, French and other European schools have suffered, it is essential that school boards prepare now for the most serious consequences which the war may entail.

STAY IN THE CLASSROOM.

The truly patriotic American of whatever age and condition in life, is chafing more or less at the necessity of continuing the hum drum of daily work. He is feeling the urge of the great things which are happening in France and he is eager to do his bit. School boards are experiencing this daily in their dealings with teachers and supervising officers of the schools. In fact it may be said without fear of contradiction that more defections from the teaching ranks during the past year have been in the direction of more immediate war service than in the interest of higher wages. Women teachers as much as men have been restless for war activities.

Just in this connection it will be of interest to school boards to read a recent public statement of Dr. Anna Howard Shaw, chairman of the woman's committee of the National Council of Defence. Says Dr. Shaw:

"There is no national asset today as much to be desired as a completely full schoolhouse; stick to your jobs. City teachers should do war work during the summer. Let them join the army of women who are going on the land or get into some outdoor occupation where they will get the things God lets exist there which cannot be found indoors. They will return to the school with greater health and treasures of memory to bestow upon the children in their charge.

"Country teachers write to the headquarters of the woman's committee in great number, asking what they can do in the city, yearning for some expression of their patriotism which will take them away from the drudgery and hardship of most of the country schools. There never was a time when the nation needed its teachers on the job in the country so much as it does now. They should stay by their schools, stand to their posts with the military spirit of a soldier on duty. The country boy and girl needs education more than ever. Parents need persuasion to keep their children in school these days when

there is fear that labor will run short. The country and city teachers' influence is greatly needed in every locality.

"Appeals come from hosts of young women who want to leave the school to do patriotic work. To the stranger or to the woman of my own acquaintance, I say the same thing. One little girl I knew when she was two years old—her father was a Greek professor and she named her big doll Kappa-Gamma Theta—wrote me to advise her what new line to take up. A little woman I had never heard of, in a great city, begged similar advice. I told them both 'Drill the young soldiers in the schoolroom.'"

TRAINING MILITARY TECHNICIANS.

More than twenty communities have been called upon by the government for the training of technicians for the army and navy. Up to the middle of May more than 12,000 men were in training as blacksmiths, machinists, sheet-metal workers, harness makers, automobile mechanics, gas engine repair men, electricians, carpenters, painters, welders, bakers, cooks, etc. The men are placed in technical high schools, trade schools, and in the mechanical departments of colleges. The school boards or other local school authorities have been asked to undertake to teach, house and feed the men and the government makes an allowance ranging from \$1.25 to \$2 according to local conditions. As the war goes on and the need for men skilled in the trades grows, further schools will be established.

It is our belief that school boards should not only offer their buildings and equipment, but should patriotically seek to render this service. If need be extensions should be made to the plant and machinery and efforts should not be spared to obtain the most competent instructors and supervisors.

And the work should be done at absolute cost as the government requests. The accounting should be accurate and complete but there should be no attempt, open or otherwise, to include items of cost which are forced and unnecessary. The training of army technicians is a most valuable patriotic service that the schools must render. It is of double value for it will increase by just so much our available supply of high grade skilled mechanics for the period after the war, and it will develop teaching methods and plans that will strengthen our industrial-education forces for all time.

A Massachusetts school committee has been haled into court on the charge of disregarding a state law that requires the display of the national colors from school buildings. On a plea of unwillful negligence and a promise to observe the law in the future, sentence was not imposed on the members of the offending committee. Certainly a law which has been on the books during ten years of peace should be observed in time of war. If school boards are negligent in such simple matters of routine, plainly prescribed by the law, it is likely that they are disregarding other and more important duties.

A system of schools is as good as its component parts. Good buildings, ample grounds, a helpful and progressive community, an efficient administration, and well qualified teachers vitally interested in their work, all working together for the highest good, must result in good schools. While weakness in any one of these unfavorably affects the result of the whole, weakness in the administrative and teaching force is fatal. Whatever then will help these to do better work should be required of all and welcomed by all.—*Supt. Asher J. Jacoby, Elmira, N. Y.*



THE BEST WAR SERVICE EDUCATORS CAN RENDER AT PRESENT

Better Schoolhouses as a Factor in Race Betterment*

J. H. Berkowitz

Special Investigator, Bureau of Welfare of School Children, New York Association for Improving the Condition of the Poor.

Secretary, Sub-Committee on Plan and Scope, Committee of Standardization of Schoolhouse Planning and Construction, Department of School Administration, National Education Association.

To a very great extent the foundations of national vigor are built on the physical environment of childhood during school life. Unfortunately the number of school boards and individual school officials who are yet to be convinced of this is not small. Many are the schools in which children are compelled to receive daily instruction under conditions that would be condemned in industrial plants where sturdy adults are employed. In such schools compulsory education spells compulsory physical unfitness. "Millions of dollars are wasted every year in schoolhouses that are ill-adapted to their uses because there are as yet no standards to which school committees can refer with confidence. Every locality is today working by its own experience and to a large extent blindly." The quotation is from the first report of progress of the Committee on Standardization of Schoolhouse Planning and Construction, presented at the National Education Association meeting at Portland, Oregon, in July, 1917. The interest manifested throughout the country in the work of this committee has shown that there is a widespread sentiment for remedying the reckless and wasteful construction of schoolhouses. At the convention of the National Education Association held in New York City in 1916, the Department of School Administration established a Committee on Standardization of Schoolhouse Planning and Construction, whose purpose is all that its name can possibly imply. That the committee is not concerned merely with architectural technique but rather with the broader conception of a schoolhouse in its relation both to educational principles and to the physical well-being of its occupants, may be gathered from the following remarks made during the discussion of the committee's second report of progress at the 48th Annual Meeting of the Department of Superintendence, National Education Association, Atlantic City, N. J., February 27, 1918.

Perhaps all has been said that possibly could be said about the standardization of school buildings mainly with regard to space on a per pupil basis and cost consideration. I should like to add something with reference to the more purely human elements which enter into the committee's work. Such elements must be considered inasmuch as the architectural requirements of school buildings also involve those of hygiene and sanitation. It would not be just that the impression go abroad that this committee is endeavoring to standardize school architecture, pure and simple, so I trust I may be permitted to define the aim of the committee as being to standardize the planning, construction and equipment of schoolhouses in any and all respects which will provide adequate accommodation and wholesome environment.

The school architect alone to whom the planning of a schoolhouse to meet local needs is often left, is not always in a position to consider those problems which are properly within the realm of the hygienist, the sanitarian or the school administrator, or of all three at once. Nor are local authorities whose business it is to provide schoolhouses always sufficiently informed to enable them to lay before the architect a comprehensive program for which he is to make provision in the schoolhouse. Neither the school board nor the school superintendent nor the architect alone can determine exactly what the requirements are for the safeguarding and promotion of the children's welfare.

In these days of world conflict, the realization has been brought home forcibly and sadly to many who have never before given any thought to the question of how much the schools

*From discussion of Report of the Committee on Standardization of Schoolhouses, delivered at Forty-eighth Annual Meeting of the Department of Superintendence, National Education Association, Atlantic City, N. J., February 27th, 1918. Revised.

of the country might contribute toward the physical betterment of the race thru prevention alone. Much has been said and much more remains to be said, as it no doubt will be, about the large percentage of young men disqualified from military service by reason of physical defects. Some of these defects are such that could be prevented or at least reduced during school life. Is it not a sad commentary on the social conscience of this nation that nothing less than the world war could rouse it sufficiently to be interested in this problem of preventable physical defects? We might at least have profited by the experience of England if not from the foresighted policy of Germany. It is well known that the improvement of school buildings, the promotion of school hygiene and the practice of school medical inspection in Germany date back very many years, and it is equally well known that the impetus for similar work in England came within recent years, and chiefly as a result of the conditions disclosed by the examinations of young men for service in the Boer War. We are going thru the very same experience now, and while some of us are shocked by the conditions revealed, others have the poor gratification of saying, "We told you so."

Our problem then in the standardization of school buildings is not merely to beautify our architecture or to beautify our cities, much as that is desirable, but to better and beautify the generation now growing up, or at the threshold of life—the coming race. The school must be a model for living conditions not only for study

FLY A CLEAN FLAG.

The following verses which appeared originally in the Philadelphia North American are recommended to the attention of school boards who permit the display of the school flag until it becomes a "windblown rag." Economy is a virtue, but as it is applied by some school authorities to the national emblem, it is little short of public insult.—Editor.

This I heard the Old Flag say,
As I passed it yesterday:
Months ago your friendly hands
Fastened me on slender strands
And with patriotic love
Placed me here to wave above
You and yours, I heard you say
On that long-departed day;
Flag of all that's true and fine
Wave above this house of mine;
Be the first at break of day
And the last at night to say
To the world this word of cheer:
Loyalty abideth here.

"Here on every wind that's blown
O'er your portal I have flown;
Rain and snow have battered me,
Storms at night have tattered me,
Dust of street and chimney stack,
Day by day, have stained me black,
And I've watched you passing there,
Wondering how much you care.
Have you noticed that your flag,
Is today a wind-blown rag?
Has your love so careless grown
By the long neglect you've shown
That you never raise your eye
To the symbol that you fly?"

Flag on which no stain has been,
'Tis my sin that you're unclean,
Then I answered in my shame,
On my head must lie the blame.
Now, with patriotic hands,
I release you from your strands,
And a spotless flag shall fly
Here to greet each passerby.
Never more shall flag of mine
Be a sad and sorry sign
Telling all who look above
I neglect the thing I love.
But my flag of faith shall be
Fit for every eye to see.

conditions. By example and thru practical application, a child must be taught to understand and to seek in his home and outside his home, the same health protective conditions that he finds in the school. He must learn to appreciate wholesome environment. A child must acquire the habit of using his eyes properly in the school, and he will not misuse them elsewhere; he must acquire the habit of sitting properly in the school or he will not acquire it anywhere else; he must acquire the habit of keeping himself cleanly or he will not acquire it elsewhere, certainly not where the environment does not suggest or inspire it.

It is well enough for a schoolroom to be provided with adequate light inlets, to take one of the many elements which make up the problem of schoolhouse planning and construction, but it is certainly equally important that facilities provided should be properly maintained and used. The architect might be guided by the standard rule of allowing a window area equal to one-fourth or one-fifth of the classroom floor area, with a consequent sufficient supply of natural light; but what of the danger which lies in excessive light when means of control are not regulated or when such control is not enforced? What of the danger to children's eye-sight when exposed to glare and direct rays of light which must produce eye strain? Having provided our school administrators and school boards with model buildings, it must then rest with them to use those buildings as they are intended to be used. I know of instances where classrooms were planned and built properly only to be so managed or misused as to constitute a menace to the children as well as to the teachers occupying them. In one case, for example, since I have touched on the question of light, in a classroom which if properly utilized, would have come up to the highest standards, the pupils' desks were placed facing an east window, with the blackboards beneath that window, yet the plan of that room, the position of windows and the wall space were such that the desks could have been placed so as to have the light come from the left of the children as it properly should be. Now any educational system in which the person responsible for such conditions is allowed to display such disregard of the elementary requirements of school hygiene, is a defective system. The problem is an educational one as much as a health problem.

In the course of my investigations made for the Bureau of Welfare of School Children of the New York Association for Improving the Condition of the Poor, and which I believe was the basis on which the chairman honored me with membership on this committee, I found that proper maintenance was half the solution of the problem of better school housing. I speak of school *housing* because there are twenty million children who are strictly speaking housed in the schools throughout this country, living in those schools, one might say, because they are there the greater part of the daytime or work time and in very many localities spend in the schools much of their after school and recreation time. Proper housing signifies adequate space for the various uses to which a building is put, safeguards for the safety of the occupants, sanitary conveniences which will tend to promote and not endanger health, equipment which will help maintain hygienic conditions and making for comfort and cheerfulness.

It is not enough that the architect has so planned a schoolhouse as to provide ample light, sizable classrooms, adequate space for all activities to which the school is dedicated, safe and sufficient hallways, stairways and exits and such other items which go to make up a good schoolhouse. Care must be taken that all of these be properly used. Children's eyesight must be protected thru the proper control of light inlets, the proper placing and maintenance of blackboards and such other details which if disregarded are contributing causes of defective vision. Too much attention cannot be given to the type of desks and seats used, their placing and their adjustment so as to permit of comfort and to minimize the chances of poor posture be-

ing developed. Whatever system of ventilation may be installed, its effectiveness is reduced, even destroyed, if intelligent co-operation between teachers, engineers, janitors and superintendents does not exist, to the end that all regulations necessary for the proper operation of the ventilating system are rigidly observed. Drinking fountains must be provided of such type of construction and operation that they will not serve as a medium of contamination and the spread of disease, and surely no fountain may be considered sanitary unless it is kept in a sanitary condition. The other factors of school hygiene into which the question of maintenance

enters as prominently as that of construction are too numerous to be discussed here.

In conclusion it might be said that whenever the labors of this committee are completed and recommendations made which, in the committee's judgment, may constitute a standardization of schoolhouse planning and construction, the problem of school housing will not be solved until school administrators adopt such means as will insure the proper maintenance of their schools. No school is administered to the highest degree of educational efficiency unless it is also maintained to a maximum of efficiency in the promotion of the physical welfare of the children housed in that school.

Departmental Organization in High Schools

H. A. Bone, Principal of the High School, Sioux City, Iowa

One of the problems of a superintendent with a distinct educational policy is to so organize his schools that there will be a continuity of practice thru the twelve years of instruction. Often the policy in the elementary schools and high schools has little sequence. Thru supervisors of special subjects, supervisors of different grades, and grade principals, the superintendent is able to carry out his policies in the first eight or nine years of the elementary period; but the organization of the high school is such that his ideas do not permeate the teaching of high school subjects. The schools are not *one* system but *two* systems, which makes a distinct break in the manner of teaching the pupil as he passes from the elementary to the high school and which is detrimental to the pupil.

The first step in eliminating this difficulty, of course, is to secure a high school principal who is familiar with and in sympathy with the educational policy of the superintendent, one who knows what is being accomplished in the elementary school, and the "why" and "how" of the method used. The high school principal is the executive representative of the superintendent, and as such is supervisor of instruction in the high school.

As a corollary to this proposition it follows that the high school principal is more than a keeper of card indexes, reports, etc. His time should not be given over to clerical work which may be done, and possibly better done, by competent office help. So far as possible he should be left to carry out the educational policy of the school system.

But in a large high school, even with competent and sufficient office help, the principal may yet find himself unable to supervise the details of instruction in the different departments of his school.

In a school of from fifty to a hundred teachers, the departments of English, mathematics, Latin, modern language, history, natural science, home economics, commercial, and manual arts, there will be from three or four to a dozen or more teachers. Under conditions such as these the principal is compelled to give but superficial attention to the details of work in a department. Obviously an intermediate officer is necessary whose business should be to look after the minutiae of a department, who shall be the representative of the principal so far as a department is concerned. This is leading gradually to placing a head over each department of the high school, a position corresponding to the deans of college and university faculties.

How may a department head be worth while to a school? What are his duties? What is his relation to the principal? What authority may the principal delegate to him?

The office is too new, as yet, for any unanimity of thought or practice thruout the country.

As implied above it is the duty of the principal to determine the educational policy of each department, making it conform to the general policy of the superintendent for the entire school system. In this capacity, he determines what courses shall be offered, the general content of each course, and the general method to be followed in the teaching of the department.

With general instructions as to these from the principal, the head of the department plans with the teachers the details of instruction and management of his department.

In order to carry out these duties it is necessary that he do less classroom teaching than the other teachers. He should have an office or at least a desk in a place of some privacy where he can confer with teachers and with pupils.

He may help the school:

(a) By carrying the spirit of the policy of the school into his department. He should visit the elementary grades of the system in which he is working and familiarize himself with the spirit, method followed, and points of emphasis in the elementary school. He must combine a wide academic knowledge of the subject matter of his department with a knowledge of elementary school methods and courses of study in such a way as to shape the work of the department to meet the needs of the high school pupil who is neither a college student nor a grade school pupil. His is the task of seeing that the instruction of the freshman in high school is closely related to that of the eighth grade and

that modifications of method and emphasis be made with each passing year as maturity approaches. His greatest contribution to his school lies in the inspiration he imparts to the students and teachers for the work of the department. He should do more for his department than look after the mechanics of reports. Instruction should be vivified and vitalized thru his personality.

(b) By visiting the classes of his department, noting instruction, classroom management, etc., and conferring with teachers as to methods of improving their work.

(c) By interviewing pupils who are having difficulties in his department. As a help to this he may have his teachers report at stated periods the names of pupils who are failing to make satisfactory progress, with suggestions as to the cause of failures. These pupils should be called to his office for private interviews and the principal should be informed of cases requiring more than usual consideration. Here lies one of the greatest opportunities of the department head. He should be quick to analyze the difficulties of the student, have the ability to gain his confidence, and offer sympathetic advice to teacher and pupil as to how work may be improved. It is well to have cards especially prepared for the teachers to use in reporting deficiencies. These may be kept on file, by the department head and progress or deterioration noted.

(d) By holding meetings of the teachers of his department at which progress of classes may be noted, general ideals and aims of the department set forth and work for the ensuing weeks planned.

(e) By keeping familiar with progress and thought in his department made in other schools, new textbooks and appliances, etc. He should have the right to submit recommendations of textbooks and supplementary helps needed by his department.

(f) By having his rating of teachers considered when the question of re-employment arises, as a rule, no teacher should be assigned to an unwilling department head.

(g) By investigating misunderstandings which may arise between teacher and pupil and reporting his findings to the principal with recommendation as to what action should be taken.

(h) By assisting in the registration, assignment, and distribution of pupils to the classes in his department at the beginning of the semester. Where early and complete preliminary organization is desired it is well for him to be on duty a week or two before the beginning of the new year to assist in this organization. In this way he not only saves time in getting school under way, but also becomes familiar with the variations in the school machinery for the ensuing semester.

(i) By supervising the making of examination questions for the classes of his department and supervising the giving of the examination.

(j) By co-operating with the principal in carrying out the general policy of the school. He should be the principal's lieutenant and right hand man in matters pertaining to the general welfare of the school. He should have qualities of leadership to secure the respect and loyalty of his own teachers for the work of the department and also for the broader problems and management of the school as a whole. Furthermore, he should have the spirit and personality to command the respect of teachers in other departments and of the entire student body. He should be a live influence thruout the school for harmony, co-operation, loyalty, high ideals of scholarship and of manhood and womanhood.



MR. D. W. SPRINGER

The former general secretary of the N. E. A. in his "war togs." He is serving as Educational Secretary of the Y. M. C. A., Camp Custer, Mich.



ADMINISTRATION URGES BOYS AND GIRLS TO STAY AT SCHOOL.

Not military service, not work in munitions plants, and not even work on farms, is considered by those in Washington charged with the conduct of the war, to be as important for boys and girls as continuing attendance at school. A statement just issued thru the Bureau of Education and signed by the secretaries of the war and navy department and the chairman of the civil service commission, says: "The entire spirit of the administration in Washington is, and has been, that the war should in no way be used as an excuse for giving the children of the country any less education, in quantity or quality, than they otherwise would have had. Both the present demands of the war emergency and the prospective demands of the necessary readjustments inevitably to follow emphasize the need of providing in full measure for the education of all the people."

In its statement the Bureau urges that teachers and pupils in elementary schools seek ways of performing some service in the school buildings, such as Junior Red Cross Work, war garden work, Boy Scouts, war thrift stamp campaigns, and similar activities. In the country and village, all girls under 14 years and all boys under 12 may well continue in school, says the bureau, thru the summer, wherever the condition of the funds permit.

Agricultural labor is considered the most immediate possibility for high school boys. It is urged that each student's case be studied individually and that no pupils be excused from school except with the written consent of the parents. It is suggested that schools can undoubtedly render a much needed service by organizing classes to train stenographers, typewriters, clerks and secretaries for the Civil Service Department.

Regarding the need in industry, government officials maintain that no emergency exists which justifies any relaxation of the laws safeguarding the working conditions of young people. The official statement points out that there are serious shortages in industry and more are anticipated but boys and girls under 18 should not be used to make up these shortages any more than can possibly be helped. It is easier to provide approved working conditions on the farms than in the mill or factory.

RULES FOR THE USE OF SCHOOL BUILDINGS.

The board of education of Minneapolis, Minn., has adopted rules to govern the use of school buildings by societies and organizations not connected with the schools. The rules read:

Buildings:

1. Application for use of building must be signed by three responsible citizens of the dis-

trict, approved by the principal of the school, be in the hands of the Superintendent of Schools at least *three days* before the date desired for the use of the building or grounds, and approved by him.

2. Notice of permission to use building as requested in application will be sent to the person who is to have charge of the meeting or exercise.

3. School buildings may be used for *non-sectarian* meetings of appropriate character, not conflicting with school uses, under the following conditions:

a. If such non-sectarian meeting is free and public and for educational or civic betterment, building may be used without charge, including heat, light and janitor service.

b. Application for the free use of any part of a building will not be approved for groups of less than *fifty* persons.

c. In case of "blanket" applications, permit may be canceled when the attendance falls below 25.

d. If for any other non-sectarian purpose, or if admission is charged, the proceeds of which are not to be used for school purposes, then charge shall be made in accordance with the following schedule:

Five dollars for any grade school gymnasium, corridor or classroom.

Twenty dollars for any high school gymnasium, corridor or classroom.

In case of "blanket" applications, the charges will be \$2.50 and \$10 respectively.

Under this rule, namely, when building is used for purpose for which charge is made, applications will not be approved for groups of less than thirty persons and in the case of "blanket" applications under this rule the permit for the use of a building may be canceled when the attendance falls below fifteen.

4. The use of *gymnasiums*, except for regular school purposes, is permitted only when the group is in charge of a suitable person, preferably an employee of the Board of Education. This means that the person in charge must be at least 21 years of age, and that he should have suitable and sufficient training and experience in handling gymnasium work according to requirements of the Department of Hygiene. The work of these classes must include general gymnastic work, floor work, apparatus work, etc. The use of gymnasiums for small groups to play some one game, as basketball, will not be granted.

5. Applications for the use of gymnasiums will not be approved for groups of less than 35, and in case of "blanket" applications under this rule the permit for the use of the building may be canceled when the attendance falls below 25.

6. High school auditorium rentals per night:

| | When no admission is charged | When admission is charged |
|--------------------|------------------------------|---------------------------|
| Central High | \$60.00 | \$30.00 |
| North High | 50.00 | 25.00 |
| South High | 50.00 | 25.00 |
| East High | 40.00 | 20.00 |
| West High | 40.00 | 20.00 |

Rehearsal, one night, \$10.00 extra.

* "Blanket" application means that application covers use of school on certain regular nights throughout the year.

An additional charge may be made by each school for use of scenery, piano, stereopticon, moving picture machine, spot light and personal property in charge of the schools. Arrangements for use of this personal property and charge therefor must be made with the principals.

7. No flag other than the United States national colors shall be displayed at any time on or within school buildings or property, except that during the period of the war the colors of those nations associated with the United States may be displayed together with the United States flag.

8. The use of *tobacco* or *intoxicants* is prohibited at all times in school buildings.

9. No part of any school building or grounds shall be used on Sunday.

10. In general, no part of any school building will be permitted to be used on Saturday night or during vacation periods (Christmas, Easter, summer, and when building is closed for more than twenty-four hours) except in special cases approved by the Superintendent.

11. Organizations and classes using buildings regularly are expected to conform to the hours specified on their applications. If the hours specified are found not to meet the needs of the meetings, the hours should be changed by request at Superintendent's office in order that engineers of buildings may know what is expected of them.

12. Groups or persons who have been required to pay for the use of the building must present the receipt of payment of rent to the janitor before he will allow the use of the building.

13. Dancing in Public School Buildings:

"Social dancing on the part of elementary school pupils shall not be permitted in school buildings, but may be permitted on the part of high school pupils at supervised social functions upon written request of the principal. All social functions of pupils are to close by 11 p. m." Elementary school buildings shall not be used for social dancing unless specifically stated in the application and said application is presented in the name of the Parent-Teachers' Association, and bears the signatures of three of the officers of the Association.

Grounds:

1. Application for the use of grade school and high school grounds (playgrounds and athletic fields) must be made in exactly the same manner as for the use of a building or any part thereof.

This rule applies to the use of the grounds by the school having charge of the grounds, to schools using grounds belonging to some other school, and to any organization or group of persons wanting to use any grounds.

2. There shall be no rental charged for use of grade school grounds.

3. The rental for use of high school grounds shall be as follows:

a. Regular football games, \$30.00.
b. All other athletic contests and other activities at which an entrance fee is charged, 10 per cent of the gross receipts from the contest, with a minimum charge of \$2.50.

c. All contests at which no entrance fee is charged, \$2.50, except that public school organization shall have free use of grounds.

4. The above rentals shall be paid to the school having charge of the grounds and shall be kept in a separate fund for maintaining, equip-

(Concluded on Page 58)



THE SPIRIT OF THE JUNIOR RED CROSS.

FOR BUSY SUPERINTENDENTS

STANDARD TESTS—A CAUTION.

A word of caution concerning the use of standard tests in the grades has been issued by W. W. Theisen of the Wisconsin State Department of Public Instruction. He writes:

"No superintendent should give standard tests in his schools unless he has some definite purpose in view. The fundamental purpose in every case should be that of improving the efficiency of the teaching. Unless it can be seen how a test will result in improvement, it may be as well not to give it at all. Every one who plans to give a test should cover each of these essential steps: (1) Work out clearly and definitely your purpose or purposes on the basis of some specific needs; (2) Select a test that will contribute to this end; (3) Study carefully the directions for giving and scoring the test and be sure that you are familiar with each detail; (4) Have the papers carefully scored and rechecked; (5) Record the results in proper form. For this purpose, a distribution of the scores should be made for each class and the score for each child should be entered upon a form for permanent filing; (6) Calculate either the median or average scores; (7) Analyze and interpret the scores of each class and discuss the findings with the teachers. This should go far enough to include a study of the children's papers to discover causes of class and individual failure, or of unusual success. It should include a discussion of the past record of the class, the methods of teaching employed, and the course of study in use; (8) Plan definite remedial measures. This is the most important step of all. These measures may mean changes in the course of study, textbooks, methods of teaching, points of emphasis, the elimination of useless subject matter, rearrangement of the time schedule, or reorganization of the classroom teaching, e. g., the introduction of group reading or the provision for more silent and fewer oral reading periods. The remedial measures may even go so far as to contemplate the promotion of children making unusually high scores, or the formation of special classes for unusually backward pupils. It may mean the sectioning of classes according to ability to profit by the instruction. This may include varying the course of study to meet the needs of each of these groups; (9) Careful supervision to assist teachers in carrying out the remedial measures; (10) 'Follow up' studies to determine the improvements brought about thru these changes.

"For those who give careful study to them, standard tests become fruitful administrative and teaching aids. They serve to substitute facts for guess work as to results. They afford a means of discovering the variations within a grade, the seriousness of overlapping of performances from grade to grade, the pupils of unusual ability or lack of ability, and the amount of progress over a certain period. They enable one to compare one class with another, or with standards of achievement. They aid in diagnosing the teaching needs of a class or of individuals and in measuring the success of different methods of teaching or courses of study. They furnish a basis for discussion between teacher and supervisor and between pupil and teacher, or parent and teacher. They serve to establish a more equitable basis for promotion. They furnish data on new pupils and for sectioning pupils according to ability. Some make use of standard tests for a preliminary diagnosis of pupils suspected of mental incapacity or for selecting pupils to be recommended for more careful mental testing. The results give the superintendent and the board tangible evidence of the successful achievements and shortcomings of the schools and afford a basis for discussing the advisability of increasing expenditures for teaching and equipment."

SCHOOLMEN'S WEEK AT THE UNIVERSITY OF PENNSYLVANIA.

From point of numbers of out-of-town delegates and the variety and interest of the program, the fifth annual session of Schoolmen's Week, held at the University of Pennsylvania, during the week of April 11th to 13th, was the best on record. About 1,500 delegates were in attendance.

At the several group meetings the topics of educational measurements, educational guidance, supervised study, cost accounting in school administration, and supervision in rural and city schools were discussed.

Prominent features of the program were a report on co-operative measurements under the supervision of the School of Education, in the use of the Curtis Standard Tests in Arithmetic in 35 school districts of the state; a report on the meaning and scope of educational guidance in the high school, private school and vocational school; and a demonstration class in supervised study composed of pupils of the eighth grade of a Philadelphia Junior High School.

The speakers from outside the state included Dr. Charles H. Judd of the University of Chicago; Dr. Payson Smith, Commissioner of Education of Massachusetts; Dr. Ernest Burnham, State Normal School, Kalamazoo, Mich.; Dr. George A. Mirick, formerly assistant commissioner of education for New Jersey, and Dr. Alfred L. Hall-Quest of the University of Cincinnati.

At the final session on Saturday morning, a resolution having a direct and vital bearing in fostering the educational development of the state, was adopted.

BUSY SUPERINTENDENTS.

Brockton, Mass. The eight-grade system has been adopted for the schools, effective next September.

The patriotism of the Amateur Athletic Union of America, an organization having under its jurisdiction the amateur field sport activities of the United States, has been questioned by Supt. Charles E. Chadsey of Detroit, in a statement which he made following the refusal of that organization to permit high school students to assist in physical training work in the Detroit schools. It was found that the nation's call for men had depleted the staff of instructors in the schools and three efficient high school students were assigned to the work, for which they were to be paid \$2.50 per afternoon for their services. The organization, in replying to a letter of Supt. Chadsey, declared that it was impossible for them to construe the amateur standing of a student so that he might take pay for his services.

June examinations in the schools of Philadelphia were abandoned in order that the pupils might more rapidly be released for farm service and that time lost during the winter might be made up.

A thoro study of school administration and finances in the schools of Philadelphia is proposed by the Congress of Presidents, an organization composed of the heads of the principal clubs and business organizations.

Cleveland, O. Final examinations at the close of each term have been eliminated in the high and grade schools. Promotion in the future will be based on the daily classwork of pupils.

The New York Department of Education has issued a notice calling attention to the fact that the compulsory education law is in full force and that none of its provisions are to be suspended, modified or changed. It is the sense of the Education Department that no child of compulsory school age may be released for any service.

A complete reorganization of the administrative and executive heads of the school system of Johnstown, Pa., is proposed to secure closer co-operation and more thoro co-ordination of school departments. The superintendent is to have a staff consisting of the principal of the high school, principal of the Junior high school, and three supervising principals. Mr. A. F. Payne, Director of Vocational Work, has been named associate superintendent, with an advisory staff of five members who are teachers of trade subjects.

State Supt. R. H. Wilson of Oklahoma has requested the names of all teachers who do not display the flag before their pupils daily. The law requires that each district own a flag and that it be on display in the schoolrooms.

Continuity of educational policy in the schools of St. Paul, Minn., may be obtained only by increasing the term of the commissioner of education, or a change in the city charter to provide for a board composed of five to seven members elected at large, for terms of either five or seven years, is the report of the Strayer Survey Committee presented to the board of education. The survey was undertaken at the request of the commissioner and Supt. E. C. Hartwell and the committee points out that the criticisms are not laid to any methods pursued by the administrative department but rather reflect on the fundamental faults in the present charter.



W. L. STEELE,
Late Superintendent of Schools, Galesburg, Ill.
(See page 68)

"A fundamental weakness in the form of administration provided by the charter," in the opinion of the committee, "is the centering of responsibility for the school system in the office of the commissioner who enjoys a short term of office.

"The best practice in the United States provides for continuity in the administration of public education thru the selection of the several members of the board for relatively long terms of office.

"Where a board consisting of five members, one being elected each year, and each serving a five-year term is provided, there is not apt to be any sudden change in educational policy. The superintendent of schools is commonly elected for a period of from three to six years. Teachers, principals and supervisors look upon the administration as continuous, and are ordinarily to be found working in co-operation with their administrative officers for the realization of a program extending over a considerable number of years.

"With a commissioner of education elected for only two years, and with the expectation that each commissioner will select a new superintendent a lack of continuity in educational policy, with an accompanying unrest and even unwillingness to exert a maximum effort for the realization of the aims of the administration might reasonably be expected to follow."

Supt. I. M. Allen of Springfield, Ill., recently outlined the plan which he has devised for the reorganization of the school system on an economic basis.

Supt. Allen plans first, to raise the cost of elementary instruction to \$33,560 and to add about forty teachers. The junior high school system is to be retained but will be unified and centralized under one management. Under the proposed plan, the number of teachers will be reduced to 65 and the cost of operation will be reduced to \$30,000. The seventh grade will remain a part of the elementary system.

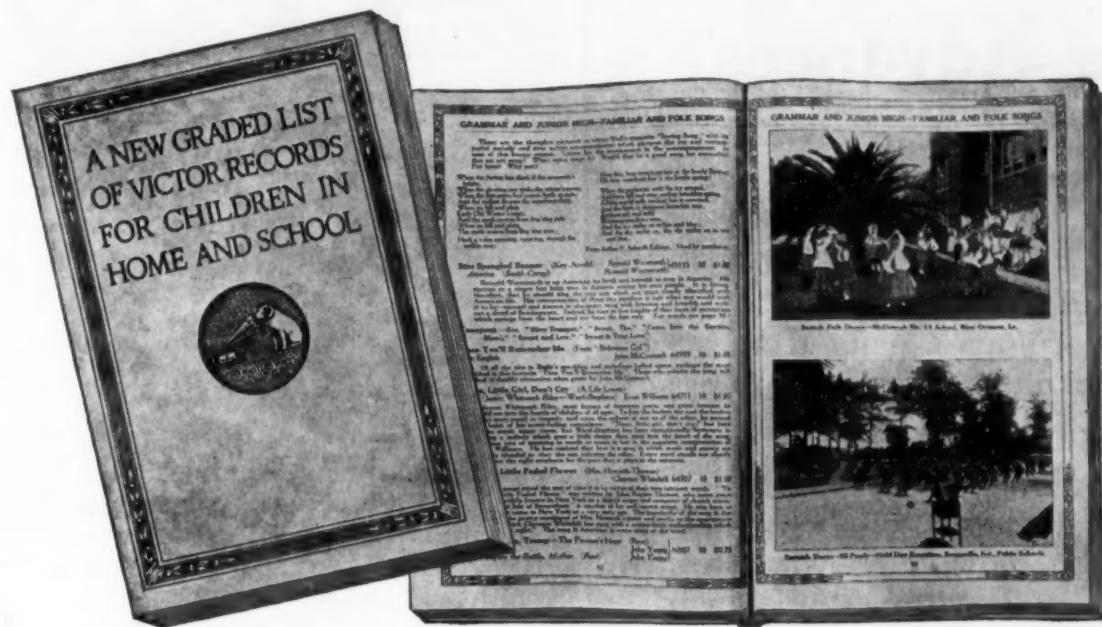
Under a law passed recently by the Texas legislature, county superintendents are to receive from \$1,000 to \$2,100 a year as salary and expenses. Formerly county superintendents were paid an annual salary of \$500.

A round-table conference of board members, superintendents and principals of the schools of Columbus, O., was held recently to take definite steps toward investigating the course of study. Complaint has been made that the course of study is superficial and does not give adequate attention to fundamentals.

Corvallis, Ore. The school board has ordered that the single-session plan be introduced in the high school as a war measure. The plan provides for the same number of hours but reduces the time allowed for change of classes. The program is as follows:

7th Period—8:00-8:41.
1st Period—8:43-9:24.
2nd Period—9:26-10:07.
3rd Period—10:09-10:50.
4th Period—10:52-11:33.
5th Period—11:35-12:16.
6th Period—12:18-12:59.

(Concluded on Page 48)



What part does the Victrola play in your school?

Now is the time to plan a definite listening course for next year, based upon the

Victrola and Victor Records.

You will find excellent help in formulating a special Victrola course by consulting the new 1918 edition of a

New Graded List of Records for Children in Home and School.

This is a catalogue of 272 pages, beautifully illustrated; it contains a list of over 1000 Victor Records, with descriptive notes classified according to use in various grades and subjects. Have you formed a circulating Record Library for your schools?

Remember that the Victrola has become an indispensable servant of education. It is used to illustrate and vitalize the lesson in Literature, History and Geography. It is used for Physical Education, Nature Study, Penmanship, Typewriting, Voice Culture, Ear Training, Opera Study, Music History, and the study of Orchestral Instruments. From Victor Records, the boys in our Army and Navy are learning Wireless Telegraphy and French.

No school is too remote for the Victrola to bring to its occupants the golden tones of Caruso and Melba, the brilliant violins of Maud Powell and Jascha Heifetz, the piano of Paderewski, and the great instrumental masterpieces played by the world's most famous bands and orchestras.

With this world of opportunity for real culture at your door, can your school afford to be without a Victrola and a well-planned course?

Ask your Victor dealer to supply you with copies of "A New Graded List" and "The Victrola in Rural Schools," or send a postcard to the

Educational Department

Victor Talking Machine Co.
Camden, N. J.



Victrola XXV, \$75
specially manufactured
for School use

When the Victrola is not in use, the horn can be placed under the instrument safe and secure from danger, and the cabinet can be locked to protect it from dust and promiscuous use by irresponsible people.

Victrola



To insure Victor quality, always look for the famous trademark, "His Master's Voice." It is on all genuine products of the Victor Talking Machine Company.

"McIntosh Lanterns are Honest Lanterns"

Price Advances

occur over night. You can't tell from one day to the next how the market will go. All quotations are made for immediate acceptance. So the "shop early" campaign is most timely.

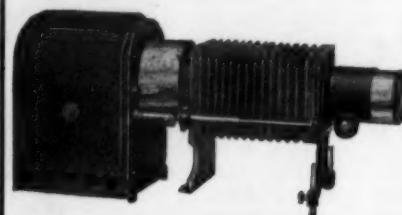
With some things it isn't a question of price. You can't get them at any price.

Shipping congestion is causing all sorts of delays—so you'll have to be patient.

And all the time you are being urged to maintain the schools at maximum efficiency, and take on additional work.

Also your terms are shortened, but you must not do less work.

Answer: Visual Instruction in the classroom. But, get your order in now.



Catalogs of slides on geography, civics, biography and lanterns for the asking.

Lanterns, \$35.00 up

McINTOSH STEREOPTICON COMPANY
427 Atlas Block Chicago

(Concluded from Page 46)

Wheeling, W. Va. The evening school closed its annual sessions, April 2 with a total enrollment of 823.

The Federal Vocational School for the conscripted men of Wheeling has an enrollment of 159 in the work of the Air Division of the United States Signal Corps.

The draftees are instructed in aeroplane and auto repairing, ignition and magneto repair, tinsmithing and coppersmithing, engine repairing and ox-acetylene welding. An acetylene generator has been installed. Instruction is given under the direction of nine instructors of the head of the manual training department of the schools.

The expenses, \$550 per month are defrayed in part from the Smith-Hughes Fund and in part by the citizens of Wheeling, the superintendent of city schools being the Federal Representative of the Vocational Board and in general charge.

Several welders and chauffeurs have been called to the cantonments and assigned work in the Air Division as skilled mechanics.

Supt. Fred M. Hunter of Oakland, Cal., on January 10th, presented to the board of education, a suggestion that principals in schools of exceptionally large enrollment be given clerical assistance. In commenting on the plan, Supt. Hunter said:

"The most valuable and most expert work of the most highly paid officers of our school system, namely, the directors, supervisors and principals, is supervision of instruction. Under the pressure of affairs in the handling of a large school system, however, the work of these officers degenerates into that of mere clerical positions. The reports of the past semester show definitely that principals, directors, and supervisors have spent far too large a proportion of their time in handling matters that are mere administrative detail. They should be given more opportunity to attack the larger problems of school administration and supervision. These problems require, not only careful professional training, but scientific research and constant application and study. It is the policy of the present administration to emphasize supervision as opposed to an emphasis on administrative detail. In order to do this,

those supervisory officers who have the largest responsibility should be given clerical assistance in handling at least some of the detail work of their positions."

The following plan was recommended for the approval of the board:

"a. That any principal, the average daily attendance of whose school may be 500 or more for the preceding semester, may requisition the Superintendent of Schools for clerical help.

"b. This clerical help shall be given by students of the Commercial Departments of the high schools, working half time.

"c. The course in the high schools shall be so arranged that credit in office practice to the extent of half time for the semester in which the work is done be given toward high school graduation.

"d. Such half time office assistants shall be paid a nominal rate of fifty cents per day for each half day's service rendered. (This payment shall be for school days only.)

"e. The total expense for such service shall not amount to more than \$1,000 during the coming semester."

Commissioner P. P. Claxton of the United States Bureau of Education, in co-operation with the committee on public information, has recently distributed copies of President Wilson's war addresses to every secondary school in the country. In his letter to school authorities, Commissioner Claxton points out that these addresses give the reasons for our entrance into the world war and set forth our aims and purposes. He urges that one or more of these state papers may be declaimed or read at the approaching commencement exercises.

The state legislature of Nebraska has repealed the law permitting school patrons to compel boards of education to provide for the teaching of German and other foreign languages in schools.

Johnstown, Pa. The local chamber of commerce has appropriated \$30 for prize medals to be distributed in June to students in the book-keeping and stenography departments of the high school.

SAVE

On Painting and Varnishing

You CAN'T save on labor, but you CAN save by using better material that goes further and that will make re-painting unnecessary again for years.

KEYSTONA

Perfectly Washable.
For Walls, Ceilings, Etc.

Has been used throughout thousands of the best finished and most sanitary schoolhouses in every part of the world. It is unrivaled for durability, for its especially suitable colors and for the small quantity required. Two coats are enough. Covers between 800 and 1000 sq. ft. per gallon.

Degrak

For Desks, Seats,
Woodwork, Etc.

Used instead of shellac or varnish, costs one-third less. This cost is further reduced nearly one-half when it is thinned gallon for gallon with turpentine. And a gallon not only goes further but takes less time to apply.

Send for full information on both of these products with prices, today

KEYSTONE VARNISH CO.

602 KEYSTONA BUILDING

BROOKLYN, N. Y.

New Bedford, Mass. The daily sessions of the high school have been lengthened to five hours and supervised study has been introduced.

Washington, D. C. The school board has adopted a resolution providing for the rescinding of the rule on corporal punishment and making it prohibitive in the future. The rule was rescinded following a case of alleged excessive punishment by a teacher in one of the colored schools.

The school board of Philadelphia will shortly undertake a complete survey of the public school system in order that it may know how efficient the schools are in training the pupils and in what ways the courses and methods may be changed to meet changing economic and social conditions. Supt. John P. Garber who has approved the board's proposed action, urges that the survey be conducted by outside, disinterested parties who are competent by training and experience to arrive at the facts.

Since 1818 when the school system had a small and imperfect beginning, the system has grown until there are more than 230,000 pupils, taught by more than 6,300 teachers and housed in a total of 307 buildings. The value of the present school plant is estimated at \$35,000,000.

Dover, N. H. In many of the grades there is a one hundred per cent enrollment of children in knitting classes. Each Friday afternoon is given to knitting and singing.

Worcester, Mass. Two hundred and forty-two boys and girls have signed up for agricultural work during the summer.

Philadelphia, Pa. A recent decision of the board permits boys to be absent during the end of the spring or the beginning of the fall term for engaging in farmwork. Boys must be 16 years old and credit will be given to the extent of two points, or one-fortieth of the total required for the course, for each month of work.

A Correction.

The table on Results of Medical Inspection, printed on page 26 of the February issue of the School Board Journal, should read "state of Virginia" instead of "state of Washington." The error crept into the author's manuscript inadvertently.

Bausch & Lomb

Leading American Makers of High-Grade Optical Products

BALOPTICON

The Perfect Stereopticon

REPRESENTS an investment which will yield rich returns, both in long service and in greater classroom interest. Because of its simplicity and safety, due to the gas-filled Mazda lamp employed as illuminant, the Balopticon can readily be operated by anyone.

Projects images of exceptional clearness and brilliancy, either from lantern slides or opaque objects, such as maps, drawings, or post cards. Catalog on request.



Models for every requirement. Balopticon for lantern slides only, \$31.50; for opaque objects only, \$42.00; for both, \$55.00; special combined model, with instant interchange, \$135.00. Ask for details.

*Special Terms to
Educational
Institutions.*

MICROSCOPES

The Accepted Standard

MANY hands, mostly inexperienced, will be laid upon the school microscope. So it must be of sturdy construction, safeguarded in every possible way against accident or carelessness. It must be simple to understand, too, and simple to operate, as well as absolutely accurate optically.

You will find all these qualities developed to an exceptional degree in the Bausch and Lomb line—combined, moreover, with moderate prices. Complete descriptive catalog free for the asking.



Model FS2 (illustrated) possesses coarse and side fine adjustments, with positive stops and automatic take-up for wear. Fine adjustment dustproof. Price \$40.75. Other models, to meet every need.

Bausch & Lomb Optical Co.

411 ST. PAUL STREET ROCHESTER, N.Y.

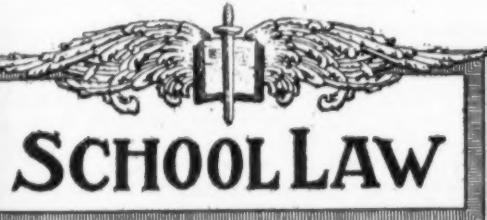
NEW YORK

WASHINGTON

CHICAGO

SAN FRANCISCO

Leading American Makers of Microscopes, Photographic and Ophthalmic Lenses, Projection Lanterns (Balopticons), Binoculars, and other High-Grade Optical Products.



SCHOOL LAW

Schools and School Districts.

If a township high school district was legally organized, another district could not be subsequently organized to occupy the same territory.—People v. Vaughan, 118 N. E. 479, Ill.

The Illinois laws of 1917, p. 744, legalizing organization of certain high school districts, renders organization of district formed of contiguous and compact territory valid from date of attempted organization, and its officers' acts valid ab initio.—People v. New York Cent. R. Co., 118 N. E. 481, Ill.

School District Property.

The board of education has no authority to contract for the erection of a schoolhouse until it has first publicly advertised for bids, and the contract can then be awarded only to the lowest responsible bidder.—Briody v. DeKimpe, 102 A. 688, N. J.

School District Taxation.

Two school districts should not lawfully exercise the power of levying taxes against the same property for the same purpose.—People v. Illinois Cent. R. Co., 118 N. E. 495, Ill.

The school tax cannot be raised above the limit of taxation by adding loss and cost of collection items.—People v. N. J. Sandberg Co., 118 N. E. 469, Ill.

Under the Missouri revised statutes of 1909, §§ 11337, 11355, the property of a resident of a school district, owning a farm, stock, and implements in another school district of the county, was taxable thereon in district of his residence.—State ex rel. Quick v. Pearson, 199 S. W. 943, Mo.

The order of the commissioner's court establishing a new independent school district is held not a redistricting under the statute, so as to place the plaintiff's land, located in another dis-

trict, in such new district for purposes of taxation, tho the designated boundaries of the new district, by mistake included the plaintiff's land.—Harbin Independent School Dist. v. Denman, 200 S. W. 176, Tex. Civ. App.

Teachers.

Where election of a teacher was void, there was a vacancy which the board had a right to fill without any notice to such teacher or a hearing upon the question.—Daviess County Board of Education v. Johnson, 200 S. W. 313, Ky.

A contract with a teacher is held that of the school board, and not that of the school officers in their individual capacity, tho the proceedings with reference to employing the teacher were not as formal as they might have been.—Clune v. School Dist. No. 3, Town of Buchanan, 166 N. W. 11, Wis.

The action of the school district in voting to suspend school after the destruction of a schoolhouse by fire is held not to discharge teacher, who did not consent to abrogation or modification of his contract.—Clune v. School Dist. No. 3, Town of Buchanan, 166 N. W. 11, Wis.

A deduction from a teacher's wages because of the destruction of a schoolhouse is held unauthorized in absence of a provision to that effect in the contract.—Clune v. School Dist. No. 3, Town of Buchanan, 166 N. W. 11, Wis.

A salary schedule provision giving a critic teacher a smaller salary than is given the regular teachers by the New York laws of 1900, c. 751, § 4, is held invalid.—Sullivan v. Board of Education of City of New York, 168 N. Y. S. 849, N. Y. Sup.

Where a teacher held himself in readiness to perform his contract after destruction of a schoolhouse, but made some effort to obtain other employment, it is held that there could be no reduction of damages because of claimed obligation to seek other employment.—Clune v. School Dist. No. 3, Town of Buchanan, 166 N. W. 11, Wis.

Pupils.

The Massachusetts revised laws, c. 44, § 7, making cities and towns liable where a school committee unlawfully excludes a child from school, but not defining what exclusion shall be

unlawful, must be considered in connection with the Massachusetts revised laws, c. 42, § 27, giving the school committee general superintendence of all public schools.—Carr v. Inhabitants of Town of Dighton, 118 N. E. 525, Mass.

In the exercise of powers under the Massachusetts revised laws, c. 42, § 27, giving school committees superintendence of all public schools, the decision of a committee involving exercise of discretion, as to excluding from school a child because afflicted with head lice, is not reviewable by the courts when they act in good faith in determining facts on which the decision is based.—Carr v. Inhabitants of Town of Dighton, 118 N. E. 525, Mass.

If the school committee of the town had given the school children an impartial hearing before excluding them from the schools as afflicted with head lice, their recision would have been final.—Carr v. Inhabitants of Town of Dighton, 118 N. E. 525, Mass.

The failure of the school committee of the town to grant a hearing to the father of the school children excluded as afflicted with head lice, does not render exclusion illegal; rev. laws, c. 44, § 8, not applying.—Carr v. Inhabitants of Town of Dighton, 118 N. E. 525, Mass.

A compulsory attendance statute must be given a reasonable interpretation so that the best interests of the child and the state alike may be served.—State v. O'Dell, 118 N. E. 529, Ind.

A bill has been passed in the Massachusetts legislature providing for an increase in the minimum salary of teachers.

New York State has just passed a military training law requiring boys between 16 and 19 years to attend drill and perform military duties. Compliance with the law entitles the youth to a certificate without which he cannot attend school or obtain employment.

Courses of instruction in patriotism and citizenship are provided for in a bill recently passed in the New York State legislature. The State Board of Regents is authorized to prescribe the courses which are intended to promote a spirit of patriotic service and to foster in the children of the state the qualities essential to good citizenship in peace or war.

The Test of Experience

For Teacher

Louisville Boys' High School
G. M. Reed, Principal
S. B. TINSLEY
Asst Principal
E. P. CHAPIN
Asst Principal
LOUISVILLE, KY., Sept. 19, 1916.

Sengbusch Self-Closing Inkstand Co., Milwaukee, Wis.

Gentlemen: I am enclosing check for \$1.40, in payment of your bill of Sept. 13. We have about 325 of your inkstands in use and they are very satisfactory.

Very truly yours,
I. R. STOUT,
Head of Commercial Dept.

Watch for
Other
"Experience"
Letters

Samples sent to Teachers or Boards, on request.

Out of the Day's Work



Doing each thing well is the secret of the success of many superintendents and school board secretaries. Often the tasks which appear small, and in themselves are of minor importance, have a large bearing directly upon the successful work of executive officers and upon the efficiency of a school system. To reproduce methods which have worked well, and to relate little stories of successful plans used by officials, is the purpose of this column.

If it is to be of the widest possible value, then the readers of this column must, themselves, co-operate by sending in their new schemes and plans. Contributions should be short, clear and to the point.—Editor.

A PUPILS' REPORT CARD.

The chief fault of the average report card is its formality and "objectiveness" in recording averages or monthly or yearly achievement in specific branches of study. It rarely gives a clue to the student's attitude toward his work and toward those many elements of improvement or failure which the parent can discover by a conference with the teacher or principal. To supply this lack, Supervising Principal John Rutherford, of Brookville, Pa., has devised a card that outlines the "attitude toward school work" and contains a number of other desirable features.

The first page of the card, which is a four-page folder, arranged to fit the ordinary No. 6½ commercial envelope, contains space for the student's name and a list of the teachers, supervisors and board of education of the local school system. On page two are outlined the following rules:

To Parent or Guardian:

Pupils are required to be regular and punctual in attendance but doors are closed until after the 1st bell rings, A. M. and P. M.

Pupils shall bring excuses from parents or guardian for being absent or tardy, but should not appear until after 1st bell rings. Pupils may be sent home for excuses.

This report is sent to you for inspection every 6 weeks, if the home work report is filled out. Please examine, sign your name and return it

to the teacher; its value will depend largely upon your interest in it.

A. 95-100, signifies very good; B. 85-95, good; C. 75-85, passing; F, signifies failure.

| SCHOOL REPORT | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 | Step 6 | Ave. |
|--|--------|--------|--------|--------|--------|--------|------|
| | | | | | | | |
| Average | | | | | | | |
| "X" is placed opposite trait to which attention is called. | | | | | | | |
| ATTITUDE TOWARD SCHOOL WORK | Step 2 | Step 3 | Step 4 | Step 5 | Step 6 | | |
| Wastes Time..... | | | | | | | |
| Work is Carelessly Done..... | | | | | | | |
| Gets Too Much Help..... | | | | | | | |
| Shows Improvement..... | | | | | | | |
| Very Comendable..... | | | | | | | |
| Comes Poorly Prepared..... | | | | | | | |
| (Excitations) Seldom Does Well..... | | | | | | | |
| Inattentive..... | | | | | | | |
| Promotion in Danger..... | | | | | | | |
| Capable of Doing Much Better..... | | | | | | | |
| Work Shows a Falling Off..... | | | | | | | |
| Showing Improvement..... | | | | | | | |
| Very Satisfactory..... | | | | | | | |
| (Conduct) Restless..... | | | | | | | |
| Inclined to Mischief..... | | | | | | | |
| Annoys Others..... | | | | | | | |
| Shows Improvement..... | | | | | | | |
| Very Good..... | | | | | | | |
| (Attendance) Number Days Absent..... | | | | | | | |
| Number Times Tardy..... | | | | | | | |

Page 3 of the Pupils' Report Card used by Supt. John Rutherford, Brookville, Pa.

O'Brien's

Liquid Velvet for Walls and Ceilings.

Beautiful, because its flat tones are appealing to the eye—soft and restful.

Economical, because its spread is large and because it is permanent.

Permanent, because it may be washed whenever necessary and thus kept spotlessly clean for years.

Other O'Brien products particularly adapted for use in schools are Master Varnish, Flexico White Enamel and Pyramid Floor Finish.

Literature sent on request.

THE O'BRIEN VARNISH CO.

1305 Washington Ave. South Bend, Ind.

Varnish Makers for Over Forty Years.

Liquid Velvet

The one great educational movement today is that of getting the home and the school to work in closer harmony. Systems of credit for home work have been vogue in many of the schools of the United States for some time and these have been most successful in assisting pupils to become useful men and women.

Education is not to teach us to make a living without work. Every pupil has some home duties and the like, and the more they do, cheerfully and well, the better for them.

Parents grade the Additional Credit work. Do full justice; give exact time and description. Mark as explained above.

This report, when properly certified to by parent or guardian, will count in granting Additional Credit in High School as explained in the 1916-17 Manual and on the Credit Cards.

I hereby make application for Additional Credit for outside work done by this pupil as described below:

(Space is here provided for since types of work and columns are arranged for a descriptive word, the time used, a general characterization of the work and the credit to be allowed.)

The parent is expected to fill in, sign this statement and the supervising principal countersigns it in approval.

On the third page the report proper appears in the following form:

The fourth page contains space for the teacher's signature, for six signatures of the parent, a notation of the promotion at the end of the year and a certificate of the student's record of attendance, provided that has been perfect during the school year.

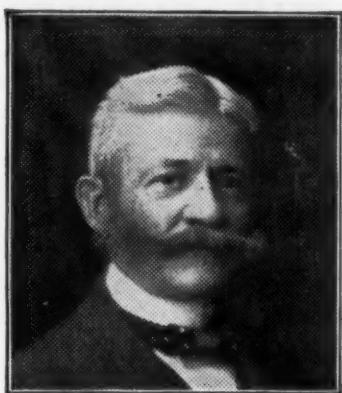
HIRING COUNTRY TEACHERS.

Sensible advice concerning the hiring of teachers is given in a recent communication from Supt. T. J. Trauernicht to the school directors of Gage County, Nebraska. The letter is as follows:

To the Members of the School Board:

Soon teachers will, if they have not already, be applying for your school and I believe it would not be out of place to offer a few suggestions.

For the benefit of your school and your boys



The Number of New Books You Buy Depends Upon the Care You Give the Old

Every year it is necessary to replace some books. That quantity depends upon the care your books receive—the better the treatment, the longer they last.

HOLDEN BOOK COVERS

Afford a simple, natural and effective method of protecting your school books, actually doubling their lives.

In these times of stress when every dollar is desperately needed, can you afford to overlook such a chance to save money?

HOLDEN PATENT BOOK COVER COMPANY

MILES C. HOLDEN, President

SPRINGFIELD, MASSACHUSETTS

and girls, I beg of you, when hiring a teacher to bear the following points in mind:

1. If you have a first-class teacher this year, keep her if you can, even tho you may have to pay a little more. It's the cheapest.

2. Look into the past record of the teacher who is applying for your school and find out whether she was successful in her school work. (We have a record of most of them on file in this office or can get it for you.)

3. Don't hire the first teacher that comes along.

4. Don't hire teachers who are mere children themselves, even tho they offer their services the cheapest.

5. Have a personal interview with the teacher who is applying before engaging her. If you are not worth going to see, he or she is not worth the job.

6. Do not hire or promise a school to a teacher who cannot show you a valid certificate when applying. (It is unlawful and you might have to pay her out of your own pocket, should she get a certificate even late in the year.)

7. Don't tell the applicant for your school, "If it is all right with Mr. So and So, I guess it's all right with me." Nine times out of ten the teacher will hire himself or herself for you.

8. *The right way:* When the school board feel that they are ready to engage a teacher, the members should meet some evening and select the applicant whom they think will teach their school most satisfactorily.

9. Do not hire a teacher just because he or she is your friend or neighbor's son or daughter. Invariably when one is hired thru a "pull" he will prove a failure.

10. *Size up* the teacher applying for your school, carefully and consider conscientiously, if you would like to have this person direct and influence your boy or girl for eight or nine months.

11. Some teachers inquire for vacancies of this office and then write or tell you, that we sent them to apply for your school. We have not done this, unless you receive word directly from us.

12. It might be a good idea to stipulate in your contract with the teacher, that in case he

or she resigns her school without giving the school board at least thirty days' notice, that he or she forfeits the last month's salary earned to the district as damages, unless the cause be serious illness.

A City-State certificate is not a better certificate than a First Grade County Certificate. They are almost identical.

I will be glad to give you a report of the work

of any teacher whom you may consider hiring. Remember, that if I can be of any help to you in looking up the record of a teacher, or in any other way, do not hesitate to let me know and I shall gladly do anything I can.

If you are in need of any supplies to perform the duties of your office, just write me a line and the matter will receive prompt attention.

A "CLEAN SCHOOL" CONTEST.

The board of education of Uintah District, Vernal, Utah, recently inaugurated a competitive contest among the schools of the county for the purpose of stimulating interest in and respect for school grounds, buildings and equipment. Improvements of any character connected with general school improvement were given due credit, and teachers worked with the students and parents in their efforts at improvement.

In the contest, schools were divided into two classes, one-room schools in one group and other schools in the second group. Each school was scored on the basis of one hundred points, with the score based on possible improvements and actual accomplishments. Prizes were awarded in each group for the best, second best and third best school building.

The scoring was accomplished thru the use of the following score card:

SCORE CARD. School Building.

Janitor Work 4 points

*Proper Sweeping 1

Dusting with Damp Cloth 1/2

Ventilation 1

Blackened Stoves 1

Care of Chalk Dust, Erasers and

Chalk 1/2

Defacement 2 points

Broken Doors, Windows and Floors 1/2

Mutilated Blackboard or Walls 1/2

Means to Prevent Mud Being Car-

ried Into Room 1

Drinking Water 5 points

*Dry sweeping, or sweeping while any part of the school is in session will greatly reduce your score.



THE DILEMMA.

The March cartoon of the Journal furnished a Massachusetts town superintendent with material for getting the local school committee out of the dilemma of paying higher salaries, etc., with unincreased school funds. He mimeographed the cartoon and distributed copies to all the voters as they entered the annual town meeting. As a result the people voted for a sufficient increase to cover the additional cost of materials and salaries.



GUARANTEED FIVE YEARS IN

a ten room home—Two years in a 30x60 foot store—One year in a six classroom school. And usually wears twice our guarantee. See guarantee below.

TRY IN YOUR HOME FIRST

Wears longer than 2 to 4 ordinary brushes—longer than 24 to 36 corn brooms.

30 Day Free Trial We Pay Express Both Ways



A post card brings one prepaid.

MILWAUKEE DUSTLESS BRUSH CO.

101 Twenty-Second St.

Milwaukee, Wis.

GUARANTEE

A satisfactory allowance on a new brush will be made if the brush you have paid for fails to fulfill all claims.

TRAIN FOR THE FUTURE

Printers' ink has done as much to prepare us to win a victory in the World's War as any other single factor. It has made possible a large army, the success of two Liberty Bond issues, and has welded into a compact whole the various races that form our population.

The greatest value of printing will be apparent in the reconstruction days following the war. Upon printing and its hand-maids, advertising and journalism, will largely devolve a re-development of the enterprises that have been destroyed during the struggle.

Printing as a School Subject

Printing is the logical subject to be taught in the public schools. Its future is assured. Wages are practically stabilized; the demand for workers is great; the opportunities for advancement are unlimited.

Now is the time to Install an Outfit

The Superintendent of Schools of your city has probably recommended school printing outfits. If so, it shows he is progressive and possessed of a vision that is looking into the future. For the sake of the children in your charge carry out his recommendation.



EDUCATION DEPARTMENT

American Type Founders Co.

300 COMMUNIPAW AVENUE
Jersey City, New Jersey

Branch Houses in nearly all large cities

| | |
|--|-----------|
| Individual Cups | 1 |
| Cleanliness of Supply | 1½ |
| Cleanliness of Receptacle | 1 |
| Care of Supply During School Hours | 1½ |
| Fire Protection | 5 points |
| Fire Drills | 1 |
| Condition of Stove and Piping | 1½ |
| Screen Around Stoves | 1 |
| Extinguishers | ½ |
| Care of Oils, Rags, Waste Paper | 1 |
| Windows, Transoms, Shades and Frosting | 2 points |
| Proper Adjustment of Shades | ½ |
| Condition of Transoms and Windows | 1 |
| Correct Frosting Conditions | ½ |
| Proper Seating | 2 points |
| Adjusted to Size of Pupil | 1 |
| Adjusted to Proper Light Conditions | 1 |
| School Grounds | |
| Garbage Conditions | 5 points |
| Receptacles in Buildings | 1½ |
| Receptacles on Grounds | 1½ |
| Floors and Halls Free from Litter | 1 |
| Grounds Free from Garbage | 1 |
| Weeds | 3½ points |
| (This credit will be given only where evidences show that effective work has been done to destroy this pest.) | |
| Condition of Fences and Gates | 2 points |
| (Fences must be in good repair to secure any part of this score.) | |
| Trees, Flowers and Grass | 2 points |
| (This includes flowers both inside and outside of the building.) | |
| Flag Poles | 2 points |
| (The full score will be given only where flag is unfurled on staff at time of inspection. Boys should be detailed for this purpose before hand.) | |
| Sheds for Horses | 3½ points |
| Complete Protection, with Feed | 1½ |
| Partial Protection | 1 |

| | |
|--|-----------|
| Tie Racks | 1 |
| Gravel | 2 points |
| (Where walks of cement or other material other than gravel, have been made since this contest commenced, full credit will be given.) | |
| School Equipment | |
| Furniture | 7 points |
| Repair | 3 |
| Varnish | 2 |
| Cleanliness | 2 |
| Textbooks | 7 points |
| Use of Mending Material, etc. | 3½ |
| Books and Tablets Free from Marks | 1½ |
| Active Book Inspector | 2 |
| Clothes Racks | 6 points |
| Adequate Supply and Proper Adjustment | 3 |
| Tidiness of Clothes | 2 |
| Clothes in Position Before School | 1 |
| School Apparatus | |
| Athletic Equipment | 10 points |
| Tennis | 2 |
| Volley | 1 |
| Basket Ball | 1 |
| Baseball | ½ |
| Swings | ½ |
| Giant Strides | 1½ |
| See Saws | ½ |
| Sand Boxes | ½ |
| Slides | 1 |
| Bars | 1½ |
| Musical Instruments | 6 points |
| Piano | 2½ |
| Victrola | 1½ |
| Orchestra (any effort will be scored) | 2 |
| Art Decorations | 4 points |
| Patriotic Decorations | 2 |
| Original Drawings of Merit | 1 |
| Pictures or Statuary | 1 |
| Toilets | |
| Sanitary Condition | 13 points |
| Deep Vault or Bucket System | 5 |
| Dry Dirt Box in Outhouse | 2 |
| Toilet Paper | ½ |

| | |
|---|----------|
| Disposition of Fecal Matter | 2 |
| Use of Lime | 1½ |
| Urinal for Boys | 2 |
| Defacement | 3 points |
| Absence of Vulgar Writing | 2 |
| Whittling and General Repair | 1 |
| Fly Proof | 4 points |
| Tight-fitting Doors | 1 |
| Lids on Seats | 1 |
| Ventilators at Top or Sides of Building | ½ |
| Banked Up All Around | ½ |
| Active Sanitary Police Force | 1 |

SUPERINTENDENTS' BULLETINS.

Supt. W. B. Arbaugh, of Ypsilanti, Mich., issues a monthly Bulletin to Teachers which is unique in scope and method. Its primary purpose is to give teachers salient points in the educational policy of the schools and to drive home in practice the methods and plans which are locally applicable in a valuable way. Occasionally attention is called in a constructive way to abuses and shortcomings on the part of teachers and pupils. Commendation of really noteworthy records in scholarship and attendance is occasionally printed. The material below which relates to special war work is typical of the Bulletins.

The war is making unusual demands on individuals and institutions. Hence, our slogan should be, not "School as usual," but rather, "School as unusual." If anything is to be neglected, it should be something that has perhaps become outworn and obsolete, or that will be so when the war is over. Winning the war is the big task in the schools as everywhere else, and everything that can be done, whether in the way of modifying schoolroom methods and practice or in lending our support as individuals and as an institution to this end, must have our heartiest efforts.

Assuming that this expresses the sentiment of every teacher in the schools, it has seemed to me that steps should be taken to make our efforts as effective as possible and to distribute responsibility for response to the various demands that are being made. The war activities and interests

(Concluded on Page 55)



ANNUAL PARK FETES OF FOLK DANCING AND GAMES AT PROSPECT PARK, BROOKLYN, N. Y.

Photo by Underwood & Underwood, N. Y.

Folk Dancing at Parks and Playgrounds



Wherever there is a Park or a Playground there should be Games and Folk Dancing. The value of out-of-door recreation for children is recognized by parents and educators. The movement has rapidly spread from coast to coast. The Cecil J. Sharp Folk Dance Records are the best material available for those having charge of Parks and Playgrounds. The dances are authentic, melodious, quaint, and were recorded under personal supervision of Mr. Sharp.

| | | | |
|------------|--|-------|--|
| A3063 | Gathering Peascods. Country Dance—English. (Cecil J. Sharp.) Prince's Band. | A3068 | The Black Nag—New Bo-Peep, or Pickadilla. Country Dances—English. (Cecil J. Sharp.) Prince's Band. |
| 10-in.—75c | Mage On A Cree—Hey, Boys, Up We Go. Country Dances —English. (Cecil J. Sharp.) Prince's Band. | | The Butterfly. Country Dance—English. (Cecil J. Sharp.) Prince's Band. |
| A3064 | Row Well, Ye Mariners. Country Dance—English. (Cecil J. Sharp.) Prince's Band. | A3069 | Hunsdon House. Country Dance—English. (Cecil J. Sharp.) Prince's Band. |
| 10-in.—75c | Three Meet, or The Pleasures of the Town. Country Dance—En lish. (Cecil J. Sharp.) Prince's Band. | | The Old Mole. Country Dance—English. (Cecil J. Sharp.) Prince's Band. |
| A3065 | Ruffy Tufty—Sweet Kate. Country Dances—English. (Cecil J. Sharp.) Prince's Band. | A3070 | Newcastle—HeartsEase. Country Dances—English. (Cecil J. Sharp.) Prince's Band. |
| 10-in.—75c | Sellenger's Round. Country Dance—English. (Cecil J. Sharp.) Prince's Band. | | If All the World Were Paper—Parson's Farewell. Country Dances—English. (Cecil J. Sharp.) Prince's Band. |
| A3066 | Blue Eyed Stranger. Morris Dance—English. (Cecil J. Sharp.) Prince's Band. | A3071 | Old Mother Oxford (Jig). Country Dance—English. (Cecil J. Sharp.) Prince's Band. |
| 10-in.—75c | Rigs O'Marlow. Morris Dance—English. (Cecil J. Sharp.) Prince's Band. | | Jockie to the Fair (Jig). Country Dance—English. (Cecil J. Sharp.) Prince's Band. |
| A3067 | Tideswell Processional. Morris Dance—English. (Cecil J. Sharp.) Prince's Band. | A7529 | Kirkby Malzeard Sword Dance. Sword Dance—English. (Cecil J. Sharp.) Prince's Band. |
| 10-in.—75c | Helston Furry Processional. Morris Dance—English. (Cecil J. Sharp.) Prince's Band. | | Flamborough Sword Dance. Sword Dance—English. (Cecil J. Sharp.) Prince's Band. |

Columbia Grafonolas and Cecil J. Sharp Folk Dance Records are used in the New York City Schools and Playgrounds, where more than 100,000 children were taught Folk Dancing last season.

Hear these records at any Columbia Dealer's. For additional lists of Folk Dances and other Columbia Educational literature, check the coupon and mail to

Educational Department

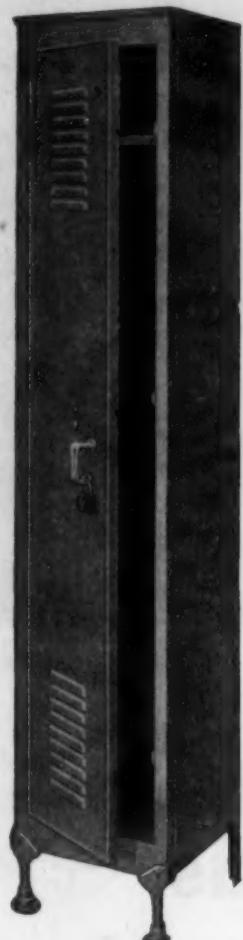
Columbia Graphophone Company, Woolworth Building, New York



Columbia School Grafonola

Clip this coupon and mail today

| | |
|--|--------------------------|
| COLUMBIA GRAPHOPHONE CO | |
| Educational Dept. | |
| Woolworth Building, New York City | |
| Please send the following literature: (Check subject desired) | |
| List Folk Dance Records | <input type="checkbox"/> |
| Music Appreciation Records | <input type="checkbox"/> |
| School Grafonola Catalog | <input type="checkbox"/> |
| "Music Moods" Bulletin | <input type="checkbox"/> |
| Name | |
| Town | |
| State | |
| Grade | (AJ June) |



62,478 MEDART STEEL LOCKERS

now installed in the High Schools of the following cities:

| | |
|-------------------|--------------|
| St. Louis | Cedar Rapids |
| Minneapolis | Columbus |
| Washington, D. C. | St. Joseph |
| Cleveland | Peoria |
| Los Angeles | Akron |
| Dallas | Phoenix |
| Kansas City | Rock Island |
| Portland | Duluth |

They are all giving perfect satisfaction.

Catalog "A-5" contains some very interesting information.

Send for it.

Fred Medart Mfg. Co.

ST. LOUIS, MO.

Steel Lockers Gymnasium Apparatus
Playground Apparatus

You Need One of the Five Models of G&G Telescopic Hoists



In order to adequately fill varying conditions—in order that you may get supreme service and satisfaction in each *particular* case, we have designed five distinct Types of G & G Telescopic Hoist. No matter what your needs, there is a G & G exactly suited.



Model A, illustrated, enables one man to perform the entire operation of raising filled ash cans to sidewalk and of lowering empty cans to cellar. It is especially designed for use where there are the *usual* conditions—there are four others to meet the *unusual*.

Send for bulletin describing them all in detail with prices.

GILLIS & GEOGHEGAN
551 West Broadway
NEW YORK CITY

Medart Playground Apparatus



PLANNING A PLAYGROUND

The problems with which you are confronted in planning your new playgrounds have probably been worked out over and over again by us, and our Engineering Department is equipped to solve any problem which may present entirely new features of construction.

Our service in planning new equipment incurs no expense or obligation. It reflects our 43 years' practical experience. We know playground needs thoroughly. We have literally grown up with the playground movement.

WRITE FOR CATALOG "W." It is a recognized guide on Playground Equipment. It covers every form of apparatus that has been approved in actual service.

FRED MEDART MFG. CO.

ST. LOUIS, MO.

Gymnasium Outfitters

Steel Lockers

Holtzer-Cabot

School Signal Systems

Protect the Children by providing a distinctive, uniform and absolutely reliable fire signal which is always heard and obeyed



If the flat in which you live is a fire trap you can move out—

If you believe a certain hotel or theatre is unsafe you need not patronize it—

But—if the school in your city is in daily danger of becoming a fiery furnace—the law compels your children to attend, just the same.

Better be safe than sorry.

Send for our New Catalog No. 16301 without delay.

It's yours for the asking.



THE HOLTZER-CABOT ELECTRIC CO.
BOSTON, MASS.
6161-65 SO STATE ST.
CHICAGO
101 PARK AVENUE
NEW YORK
1104 UNION TRUST BLDG
BALTIMORE

DURAND STEEL LOCKERS

Durand Steel Lockers are built for hard usage; you can see at a glance the solidity of their construction. Their simplicity, too, makes for strength as well as for cleanliness. Mechanical parts--hinges, bolt-bars, locks, etc.--by their smooth working testify to the care we give these details.

When you buy lockers, you want Durand Steel Lockers. They depreciate but little with use, and they are easily moved and relocated in the event of moving to a new building.

For these reasons you can afford to buy only Durand.

Write for catalog of modern styles of lockers for schoolroom, coatroom and gymnasium



DURAND STEEL LOCKER COMPANY

1521 Ft. Dearborn Bank Bldg.,
Chicago, Illinois

921 Vanderbilt Bldg.,
New York City

(Concluded from Page 52)

that have thus far developed sufficient importance to justify recognition would appear to be the following:

1. The Liberty Loans.
2. Y. M. C. A. (and similar interests).
3. The Red Cross.
4. Food Conservation.
5. War Savings and Thrift Stamps.
6. Teaching the War and Problems Growing Out of the War.
7. War Gardening.

Instead of assigning teachers to each of these groups, I shall ask each teacher to enlist under one of these leaders, selecting the interest that makes the strongest appeal or toward which he feels able to contribute most. Some of the interests are inter-related and will, for that reason, call for co-operation between groups. Neither is any one of them exclusive. Hence, even tho teachers shall have attached themselves to a particular interest, they will be called upon at times to help promote other interests in their respective grades.

I shall be ex-officio a member of all groups and will spare no effort to help in every way possible.

W. B. Arbaugh.

February 18th, 1918.

SIXTY-NINE YEARS A SCHOOL TEACHER.

With a record of 69 consecutive years as a school teacher, Miss Elizabeth Carpenter Blanding, one of the oldest, if not the oldest, school teachers in the United States, will retire within the next few weeks at the age of 85 years. That is, she plans to retire, but the residents of Attleboro, Mass., who send their children to her, say they will try and get her to change her mind before next fall.

"I haven't taught German since the United States entered the war," she boasted, "and won't teach it again to anyone." Besides that she finds time to knit for the soldiers, and the Red Cross chapter of Attleboro has been the recipient of quite a good deal of her work.

The number of Miss Blanding's pupils who have been instructed by her within the last 69 years runs way up in the thousands. Just how

many she doesn't know. There are several families in Attleboro who say that she has taught four or five generations of them.

When a girl of 16, Miss Blanding began teaching in the public schools of Attleboro. She kept at it continuously and only until a year or two ago did she begin teaching a private class. This year she has 14 pupils. Some of them have grandparents who went to her class years ago.

"Teaching has always been a pleasure," said Miss Blanding, "I love children and if I do not teach next year I know I shall miss the little folks. No, I don't find that children are bad. Of course, they are sometimes mischievous, but not any more so nowadays than they were years ago. There are many studies in the schools now that I don't think we should have. I think there are a great many things taught by teachers now that should be taught in the homes. If mothers would put in more time teaching their children and not spend so much time going about, it would be better for the children and teachers alike."

MISSOULA EGG-LAYING CONTEST.

The results of the first egg-laying contest held in the United States have just been issued in the

form of a brief report by L. E. Harris, director of the school board at Missoula, Mont. The school has 36 fowls contributed by the pupils and capable of producing 9½ dozen eggs. The total value of the eggs produced was \$5.60 while the cost of feed amounted to \$14.32, leaving a loss of \$8.72 for the month. The loss is attributed to the high cost of straw and poultry feed, to the poor condition of some of the birds and to the lack of knowledge in selecting proper rations. This will be remedied in future so that the venture may be made more profitable.

In the preparation for the contest, the work was divided among a number of interested persons. The boys made the house, feeders and trapnests with lumber contributed by the school board, the girls furnished the fowls and interested citizens provided the leg bands and prizes. The work of marking eggs, mixing feed and figuring costs was undertaken as regular class projects.

The contest aroused a great deal of interest among the students and the results were so satisfactory that they felt confident of better results next time. The experience of the students showed that some farm flocks are possibly kept at a loss while others pay their way and return a good profit to their owners.

HENRY SABIN PASSES.

The death of Henry Sabin on March 22, at Chula Vista, Cal., removes one of the oldest schoolmen of the country and certainly one whose long years of activity made him an important factor in the up-building of the schools of the middle west.

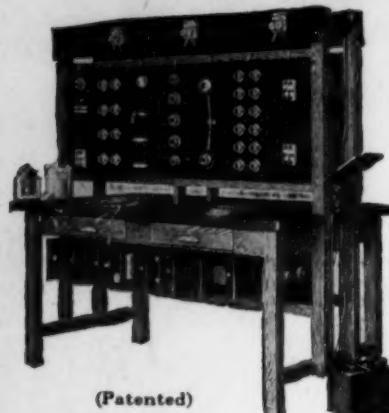
Henry Sabin was born at Pomfret, Conn., in 1829 and graduated from Amherst College in 1852. He held teaching positions in New England and in New Jersey before entering college and after graduating in 1870 came to Clinton, Iowa, as city superintendent of schools. From 1887 to 1891 and from 1893 to 1897 he was state superintendent of public instruction for Iowa. He was a prolific writer on vocational subjects and was active in association affairs and in the promotion of school legislation. During the past 20 years he has lived in retirement in California with his sons.



MISS ELIZABETH CARPENTER BLANDING
Attleboro, Mass.

K

For Teaching Practical Electricity



Kewaunee Electrical Laboratory Equipment

This is a most adequate, yet simple and economical unit for teaching practical and theoretical electricity. It permits the performance of more than sixty experiments. It is especially designed for High School classes.

We are equipped to supply all demands, from the smallest school requirement to the largest demonstration purpose—for class or lecture room work, general laboratory practice or individual experiments.

The School of Engineering of Milwaukee,
so well known throughout the United States for its practical electrical course, and the Kewaunee Mfg. Co., so well known for its superior laboratory equipment, have collaborated in the production of this line of Electrical Equipment.

Write for detailed information.

Kewaunee Mfg. Co.
LABORATORY FURNITURE EXPERTS
KEWAUNEE, WIS.

Chicago General Sales Office, 460 E. Ohio Street
New York Office, 70 Fifth Avenue

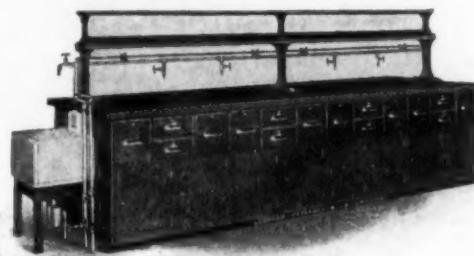
BRANCH OFFICES:
Columbus Atlanta Dallas Kansas City Spokane
Baltimore New Orleans El Paso Minneapolis San Francisco
Little Rock Denver

K

LEONARD PETERSON & CO., Inc.

Pioneer Designers and Manufacturers of
High Grade Laboratory Furniture

For Chemistry, Physics, Biology, Physiography, Domestic Science, Domestic Art and Manual Training



Superior quality, strength, solidity, and durability are built right into our furniture. Every detail is well worked out. Our furniture has met with the approval of hundreds of educators throughout the United States, Canada, Porto Rico, and China.

Send for domestic science and manual training catalog No. 8, and laboratory furniture catalog No. 9.

Leonard Peterson & Co., Inc.

MANUFACTURERS OF
GUARANTEED LABORATORY FURNITURE

1234-48 Fullerton Ave.

CHICAGO, ILL.

New York Office: 70 Fifth Ave., New York City

BUILDING and FINANCE

NEW SCHOOL BUILDING STANDARDS IN NEW YORK CITY.

The New York Board of Education has accepted a new set of standards for planning and equipping elementary schoolhouses. The standards are rather broad and flexible and have been developed to permit of closer economy as well as latitude in providing for the work-play-study type of school organization. The program provided that all schools shall have an auditorium of from 350 to 580 seating capacity, proportioned to the number of classrooms which is not less than 26 nor more than 48.

The standard classroom is to be 24 x 28 feet and the seating is arranged for 48 primary desks, or 46 intermediate desks, or 42 grammar desks. Kindergartens are arranged for 50 children.

The gymnasium space in buildings of twenty to 48 classes is to consist of a space equivalent to two classroom units. In buildings of more than 48 units, two gymnasiums are to be provided and in buildings of less than twenty rooms, a part of the play ground space may be set aside for gymnasium use.

The room for domestic science should be equivalent to two classroom units and should be divided between a cooking room and a small room for sewing and home making. The two rooms together should provide for units for 40 girls.

The library is to serve as a study room and is to consist of a single classroom unit. It is to be separated from adjoining classrooms by means of sliding doors which can be opened, and is to

be furnished with ten narrow tables all facing one way and large enough to accommodate four pupils each.

The elementary wood working room is to be arranged as large as 1½ classroom units. It is to be fitted with twelve double benches for 24 pupils and is to contain lumber racks, etc.

The elementary science room is to be the size of 1½ classrooms and is to contain an apparatus cabinet, tables and seats and the necessary fittings for teaching elementary science.

The typewriting room is to consist of 1½ classroom units and is to be so divided by means of a sliding partition that one-half the class may be engaged in typewriting practice while the remainder is studying some other commercial branch. It is to contain six typewriting tables holding four machines each and 24 ordinary desks and seats.

The sewing room is to consist of 1½ units for 40 girls and is to include in its equipment a cutting table, ten sewing tables for four girls each and footstools, ten sewing machines, etc.

The printing shop is to consist of 1½ classroom units and is to be arranged for classes of twenty pupils.

The music room is equivalent to 1½ classroom units and is fitted with 80 opera chairs for as many pupils.

The drawing room is to be arranged for 44 children at eleven drawing tables and is to be not smaller than 1½ classroom units.

The millinery room is to be the equivalent of 1½ units and is to be fitted for 40 pupils.

The machine shop is to be equipped for classes of twenty pupils and is to be equivalent in size to two classroom units.

The plumbing shop is to contain one classroom unit and is to be arranged for 40 boys.

The sheet metal shop is to be equivalent to 1½ units and is to accommodate twenty persons.

The electric wiring shop is to furnish space for twenty pupils in each class and is to be arranged in a single classroom unit.

The superintendents have urged that all classrooms contain the cardinal points of the compass painted plainly either on the floor or the ceiling; that a small bulletin board be affixed

to the wall in each classroom near the entrance door; that the teacher's locker be fitted with a small mirror and that linear scales for illustrating dimensions be painted on one classroom blackboard.

BUILDING AND FINANCE.

Minneapolis, Minn. The board of education, early this spring, met in consultation with the board of tax levy before proceeding with the making of contracts with teachers and employees. The new plan makes it possible for the tax levy board to approve a budget, in the making of which it has had a chance to express its opinions. The plan marks an entirely new step in the Minneapolis municipal financing.

The American Institute of Architects has been asked to give its advice on the plans for school buildings prepared by C. B. J. Snyder, superintendent of school buildings. The scheme calls for the appointment of an advisory board of architects who shall work out a method of obtaining the best possible construction with the lowest possible cost.

The school board of Quincy, Ill., upon the recommendation of Clyde L. Sears, business manager, has asked for a higher tax rate for education in the cities of the state in order that the increased cost of supplies and materials and the increased salaries of employees may be met. A number of other cities in the state have been asked to co-operate in the movement for a higher tax rate.

The school board of Conshohocken, Pa., has asked that the tax rate for education be raised from eight mills to eleven mills. Increased expenditures make the higher tax rate necessary.

New York, N. Y. Constant changes in recommendations by the board of superintendents and the lack of a well formulated policy are given as the reason for the delays in school building construction. The proposed new building for Public school 130 is cited as a flagrant case.

The erection of this building which was one of the first to be undertaken by the new board, was originally intended for both sexes from the kindergarten to 4B, and for girls only to and including the ninth year. The matter was referred to a special committee and the recommen-

The Underwood Typewriter

Its Merit is Proved by the Successes It Has Made



Holder for 13 years of the International Trophy Cup for SPEED--ACCURACY--DURABILITY Possessor of Elliott Cresson Medal for mechanical supremacy

It is the machine for the operator--all World's Champions use and endorse it

Demand of the business man has made it the popular machine for tuition purposes

UNDERWOOD

dation was made that a junior high school be erected in place of the proposed building. Later recommendations were submitted for a junior high school which resulted in a request that action be deferred. Permission was given the board of superintendents at a later date to withdraw its recommendations and to offer the suggestion that the original proposal be approved. The approval of the change in policy will mean a loss of two and a half months and an admission that the unanimous vote for a junior high school was a mistake.

Lock Haven, Pa. The board has substituted names for the numbers formerly used on school buildings.

Mr. T. P. Wenner, secretary of the school board at Allentown, Pa., in a communication to the board, asks that the borrowing capacity of the school district be increased. In his letter, the secretary points out that in the last six years contributing agencies have caused the board to face burdens unmatched in any other civic organization, and has been the cause of increasing the budget since 1916.

The secretary urges that the board make provision for the maintenance and upkeep of the buildings and for erecting new structures as the need arises. He points out that the city must extend the progressive spirit in order that it may meet the demands of the future for the school population.

THE WAR AND THE SCHOOLS.

Chicago, Ill. The school children, up to May 4 went over the top in the Liberty Loan Drive with a total of \$6,443,250 worth of bonds sold. In the grade schools the Stewart took the lead while the Lane Technical was in the forefront of the high schools.

The increasing scope of the work for the rehabilitation of disabled soldiers and sailors in the service of the government has resulted in a request by administration leaders that the Congress at Washington give early attention to a definite plan for the organization, administration and support of the work. To meet the emergency a bill has been presented in the Senate which provides that every soldier and sailor who is unable to resume his former occupation or to

enter upon some other suitable or gainful occupation shall be ordered by the Bureau of War Risk Insurance to follow a course of vocational education prescribed by the Federal Board of Vocational Education. The bureau is to have the power to order such persons to take the courses, the latter to be paid monthly compensation equal to the monthly pay for the last month of service. All medical and surgical work necessary to functional and mental restoration is to be under the control of the War Department and the Navy Department. The Vocational Board will be authorized to receive gifts and donations from public or private sources. The bill appropriates \$2,000,000 annually for buildings in which to instruct the men, for equipment, traveling expenses, investigations and special mechanical appliances.

Baltimore, Md. The Thrift Stamp War Savings Drive in the schools has created a great deal of interest according to a recent report of Supt. Charles J. Koch. Since January the pupils have contributed not less than \$66,000 to the war savings fund thru the purchase of thrift stamps. The entire amount was composed mostly of pennies, nickels and dimes saved and earned by the children.

The school board of Pittsburgh has offered the shops of the Schenley High School for the training of mechanics in the airplane service of the government. The instruction is to be given six days a week with eight hours of work each day. The work is in charge of Mr. F. W. Borland, instructor in manual training at the school, and four assistants.

The vocational and technical schools of New York City are to be turned over to the government the latter part of June for the training of mechanics for the army and navy. The courses are to cover two months and will include automobile work, forge work, sheet metal work, electrical work, machine shop practice, carpentry, plumbing and pipe fitting.

The pupils of the Cobbet School, Lynn, Mass., during the month of April held a display of articles made for the girls in the French war area. The display included dresses, hoods, helmets, sweaters, afghans, wash cloths and knitted

jackets. The boys in the school furnished the handkerchiefs and knit wash cloths. The school has a one hundred per cent membership in the Junior Red Cross and has collected \$100 which has been used in the purchase of yarn for knitted articles. The work is divided into three sections, one for each floor of the three-story building.

Battle Creek, Mich. A surgical dressing room has been opened in the high school where students may spend their free time in Red Cross work. Students who undertake the work are compelled to prepare their lessons at home.

Springfield, Mass. High school students recently purchased a \$1,000 Liberty Bond of the third loan.

Bridgeport, Conn. A number of the teachers in the local schools will take positions in some of the manufacturing plants this summer. The manufacturers have asked for the co-operation of the teachers to meet the demand for workers.

The school board of Portland, Ore., has made arrangements for training two hundred drafted men in five skilled trades.

The Junior Red Cross work in the schools of Ketchikan, Alaska, has been successfully conducted under the direction of Supt. W. A. Knox. During the first three weeks after the organization, the pupils made 630 gun wipes, one quilt, five gun rags, three wash rugs, twenty mufflers, one crib blanket, several baby blankets, fourteen sweaters, two pair of socks, and thirty trench pillows. The pupils have displayed much interest in the signing of the loyalty cards which have been promptly signed by all.

The citizenship night school at Nenana, Alaska, has 32 members enrolled of which three are women. The ages range from 22 to 52 years and nearly all the nationalities are represented.

The school board of Lewistown, Pa., has denied a petition of 39 teachers that they be not compelled to make up lost time because of fuelless days and that extra pay be given for teaching an extended term. In refusing to recognize the claims of the teachers, the board pointed out that they were complying with orders and that they expected the teachers to do their bit in war service.

Buy Now

FROHSE LIFE SIZE Anatomical Charts AMERICAN EDITION

Revised and Edited by

MAX BRÖDELProfessor of Anatomical Drawing,
Johns Hopkins Medical School

17 Life Size Charts on
7 Large Plates
Colored True to Nature
For High Schools, Normal
Schools, Colleges

LIST OF SUBJECTS

Human Skeleton (Front View)**Human Skeleton (Back View)****The Nervous System****Circulatory System****Viscera of the Chest and Abdomen (Four Views)****Section through Head—Teeth**

FULL SET—7 PLATES—UTILITY CASE

Prof. Brödel's name insures Anatomical Accuracy.
A distinct contribution to Medical Science.

Send for complete description and colored reproduction.
We ship on approval.

A. J. NYSTROM & CO., Publishers

Buy Now

2249-53 CALUMET AVE., CHICAGO

Buy Now

SCHOOL BOARD NEWS.

(Concluded from Page 45)

ping and policing of the grounds, which fund shall at all times be under control of the Board of Education. The school shall report annually in June to the Board of Education the receipts and expenditures from such fund.

Care of Athletic Grounds:

1. The principal of the school shall be directly responsible for the care and upkeep of the playground and equipment.

2. The principal of the school shall see that the playground is efficiently policed at all games.

Sale of Tickets:

1. Tickets for admission to playgrounds may be sold at the gates of the playground, but at no other place while on sale there.

2. Student tickets for admission to playgrounds may be sold at one place only in the school buildings and must not be placed on sale at any place outside of the school building.

AMONG BOARDS OF EDUCATION.

Minneapolis, Minn. The school board has ordered that all requests for the public use of school buildings be made to the superintendent and referred to the board for approval. The board has adopted a policy not to close the buildings to political meetings.

Johnstown, Pa. The board has purchased an automobile truck for the handling of repair materials and the distribution of general school supplies.

The school board of Philadelphia, upon the recommendation of Supt. J. P. Garber, has ordered that carfare be furnished to children of open air classes who live more than ten blocks from the school, or who are in such physical condition that they cannot walk to school.

The school board of Newark, N. J., has denied a request of an army recruiting officer that recruiting agents visit the high schools to tell boys about the opportunities for technical training to be offered in the army. It was ordered that the superintendents' office prepare a circular outlining the vocational opportunities both in and out of the army, to be distributed among high school graduates.

Chicago, Ill. The name, General Frederick Funston, has replaced Bismarck on one of the elementary schools. The name was the unanimous choice of the school administration committee. Bismarck pictures and statues have been removed by order of the board.

The school board of Woonsocket, R. I., has given the janitors an increase of fifteen per cent in wages.

The Buffalo City Council has fixed the salary of the superintendent of schools at \$7,000, a reduction of \$3,000 from that originally agreed upon. The school board has a list of 24 educators from which the new incumbent may be selected.

Chicago, Ill. To aid in the conservation of gold, Supt. John D. Shoop has ordered that students discontinue wearing all forms of gold jewelry. Graduating classes are prohibited from buying gold class pins.

Denver, Colo. The school board has adopted a set of by-laws which removes all limits to the salaries or lengths of terms of Supt. C. M. Cole, Herbert M. Monroe, the board attorney and W. H. Edwards, the school architect. The rule provides that when a vacancy occurs, the board may at the regular meeting or at the time of the vacancy, appoint a superintendent, architect or attorney, for such terms and at such salaries as may be mutually agreed.

Commissioner P. P. Claxton of Washington, D. C., recently issued an appeal to the college and school graduates of the country to conduct their 1918 graduation exercises as simply as possible and to invest money usually spent on graduation activities, in war saving stamps. Dr. Claxton estimated that approximately 300,000 boys and girls and young men and women will fill the ranks of the graduates this spring and summer and 1,300,000 will emerge from the elementary and grammar schools. If graduation expenses are reduced it is possible that \$6,000,000 may be saved for patriotic purposes.

The daylight law was recently the cause of a strike in the rural schools of Oklahoma. H. H. Brooks, postmaster at Luther, and president of the school board, was charged by federal officials with attempting to evade the purpose of the day-

Message from our

Uncle Sam

on

Physical Education and Play

"In the new civilization one of the most important problems of the school, and the central problem of physical education, is how to secure and conserve health. This is becoming more and more a community problem."

"Whenever conditions will permit, the physical exercises should be conducted on the playground."

"Two double periods per week should be considered a minimum for this work. These exercise periods of ninety minutes twice per week should be supplemented by play periods after school of at least one hour, and, of course, by the regular recess periods and setting-up exercises between class periods."

"*Grounds and gymnasiums are practically useless unless they are kept equipped for activities.*"

—Extracts from Bulletin No. 50
U. S. Bureau of Education.

We have "Everything for the Playground."
Let us help you. Send for free catalog.

HILL-STANDARD CO.

116 Fun-Ful Avenue

Anderson, Ind.

THE FUN LINE
PLAYGROUND EQUIPMENT

light law, by opening the schools at ten o'clock—instead of nine o'clock. Members of the board argued that beginning the school sessions an hour earlier worked a hardship on pupils who lived many miles from the school.

State Supt. A. O. Thomas of Maine who has just completed a study of the teacher shortage in the state has issued a letter calling on the school authorities to study their problem and to meet it. Supt. Thomas, in his letter, writes:

"From present indications we shall need from 1800 to 2000 recruits to supply the teacher shortage in September. Besides the call to the colors and the work of mercy in the Red Cross organizations, the pull of greater compensation in business positions and in clerical work for the federal government have depleted our ranks. Teachers who have taught for several years on a salary of \$10 to \$12 per week for thirty-six weeks in the year have accepted government positions, recently, at \$1,100 to \$1,200.

"While teachers are not mercenary and are willing to accept a share of the burden they should have a reasonable compensation. There is a national call for twenty-five per cent increase in the wages of teachers for the coming year. This will not be an easy matter for the people to meet with the already heavy burden of direct taxation. In the numerous conferences over the State which we have held the school officers seem ready and willing to do all they can to meet the situation and in many instances salaries of teachers have been advanced from one to two dollars per week for the coming term."

Dr. Thomas hopes that many of our most promising young people who have graduated from our high schools and academies and who will graduate this year may be induced to enter this important branch of our country's service. This is a patriotic duty and those who accept the call will be helping not only to win the war, but to preserve our free institutions when war is over.

The State Department of Education will soon undertake, with the co-operation of all our educational forces, both public and private, a campaign to supply the shortage. H. A. Allan, agent for rural education, will have charge of the movement.



Von Duprin

Self Releasing Fire Exit Latches

Installed in the Highland Park High School.
And why?
Because **EVERY EXIT IS A SAFETY EXIT WHEN EQUIPPED WITH**

Von Duprin
Self-Releasing Fire Exit Latches

A school above all buildings should be fully protected against disastrous results from emergencies and panics.
When these conditions occur, the most important thing is to empty the building --- and do it quickly and without interruption.

Von Duprin Door Devices make every exit a safe exit.
Von Duprin Devices are adaptable to every kind of door construction.

169 designs are available, one of which is sure to meet your door requirements.
The schools in 63 cities are completely equipped with **Von Duprin** Self-Releasing Exit Latches. This fact unquestionably proves **Von Duprin** superiority.
Your Board and your Architect are assured our unlimited co-operation.
Catalog No. 12-C contains valuable data, or see specifications in Sweet's Architectural Catalogue page 246 to 750.

VONNEGUT HARDWARE CO., INDIANAPOLIS, INDIANA

Make Your Shade Selection EARLY!

Investigate our
Self - Balancing
Adjustable Fixtures

and



This material is a superior plied yarn fabric, just the thing for modern school buildings.

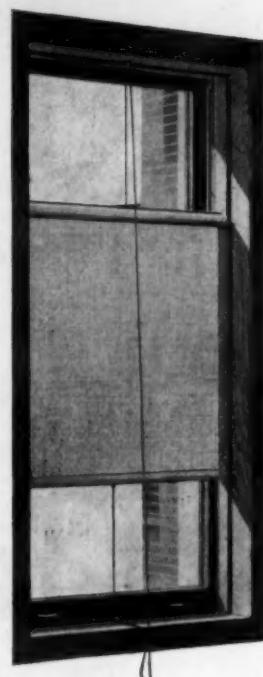
Its superiority is recognized by those who insist on the best.

It will appeal to you if you are particular.

THE ORIGINAL

218-219
WEST OHIO ST.

WALGER
AWNNG COMPANY CHICAGO
Established 1905



Your Opportunity

to install window shades that will protect the eyes of the pupils and at the same time admit plenty of light. During the summer months when schools are not in session you will have a splendid opportunity to install window shades that are attractive.

The light in the schoolroom should be regulated in such a way so that both the teacher and pupil will be able to do better work.

Open your school in September with the well known

Draper's Cotton Duck Adjustable Window Shades

which can be adjusted to suit the conditions in the schoolroom as they actually exist.

If you will write us, giving the number of windows in each room, our experts will be pleased to make suggestions and will quote you on equipping your building. This places you under no obligations to us.

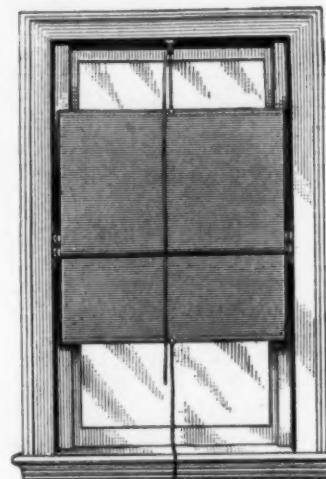
LUTHER O. DRAPER SHADE CO.
SPICELAND, IND.

CORRECT SHADES FOR SCHOOLROOMS

Should give maximum light
with good ventilation

TWO
SHADES AT
CENTER
OF WINDOW
PERMIT
PROPER
REGULATION
OF LIGHT

OUR SPECIAL
BRACKETS
No. 86 & No. 87
ARE
DESIGNED TO
ASSIST
IN CORRECT
RESULTS



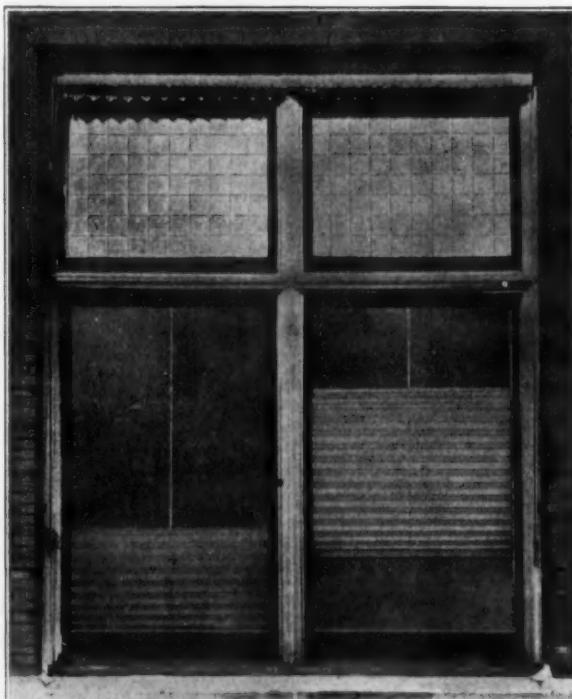
SPECIFY
OSWEGO TINTED CAMBRIC OR TRIPLEX OPAQUE
with
HARTSHORN SHADE ROLLERS

(Send for special sample book)

Stewart Hartshorn Co. Oswego Shade Cloth Co.

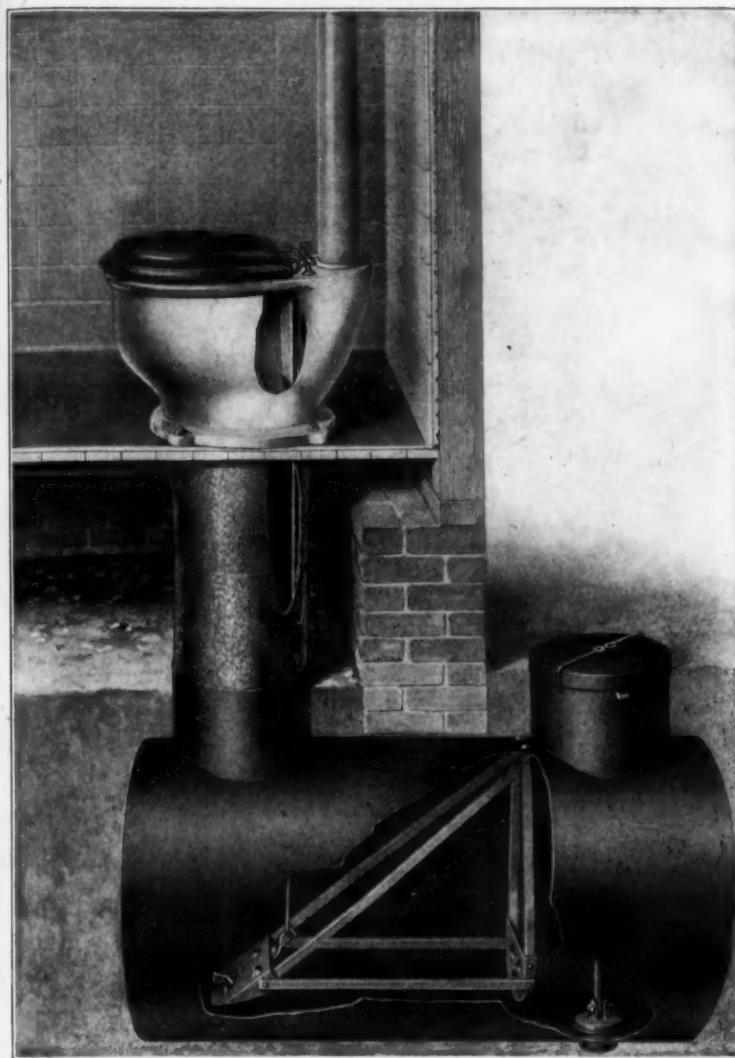
General Office 250 Fifth Ave., New York, N. Y.
Chicago Office 332 So. Michigan Ave., Chicago, Ill.

HERE'S A REAL ADJUSTABLE SHADE



THIS is something entirely new and in a class of its own. Shuts off the dazzling rays of the sun and at the same time admits plenty of daylight. One Superintendent says, "Perennial Shades seem to be the most efficient and practical shades that I have ever seen." We receive complimentary letters almost every day from satisfied users. We shall be pleased to give you more information. Write

PERENNIAL SHADE CO.
FARIBAULT : : MINNESOTA
Or, J. W. HULME CO.
338 Minnesota St., ST. PAUL, MINN.



THE WATERBURY SANITARY CAUSTIC CLOSET

For Schools and Homes Without Running Water

"The greatest improvement offered to Rural and Village Schools since the Heating and Ventilating System."

It looks like a flush Closet. The Bowl is of the same vitreous china and the Seat is the same. But the Bowl does not catch the waste nor wash it out by flushing, the opening in the bottom being large enough to allow the waste to pass directly into the Vault where it is immediately attacked by a powerful Caustic Chemical.

As no water is used for flushing, the Vault needs to be emptied but once or twice each year.

CLEAN SANITARY ATTRACTIVE ODORLESS

Write to us or our Nearest Jobber for Complete Information and Prices

The Waterman-Waterbury Co.

Minneapolis, U. S. A.

Manufacturers of the Famous

WATERBURY HEATING AND VENTILATING SYSTEMS

JOBBERS OF WATERBURY GOODS

Northwestern School Supply Co., Mpls. Tri-State School Supply Co., Memphis, Tenn.
C. A. Bryant Co., Dallas, Tex. Southern School Supply Co., Raleigh, N. C.
Superior School Supply Co., K. C., Mo. Murray School Supply Co., Birmingham, Ala.
Cleveland Seating Co., Cleveland, O. J. H. Wilde, Chico, Calif.
Geo. C. Everett, Baton Rouge, La. Waterman-Waterbury Co., Ltd., Regina, Can.

Open territory available for reliable Jobbers and Dealers.

TEACHERS' SALARIES

The school board of South St. Paul, Minn., has adopted a complete salary schedule, to take effect in September, 1918. The schedule and the rules pertaining to increases are as follows:

In the elementary grades, the minimum salary ranges from \$70 to \$75 per month, with an increase of \$7.50 per month up to a maximum of \$100 per month for 1918-19; thereafter increases of \$5 per month will be given up to a maximum of \$110 per month for special individual merit.

1. Beginning teachers having one year of successful experience in some other district may be started with a salary of \$72.50 per month.

2. Beginning teachers having two or more years of successful experience may be started at \$75.00 per month.

3. To be eligible for appointment as a qualified elementary teacher or kindergarten teacher one must have at least one year of successful experience in teaching under approved conditions in a regular system of graded schools. Inexperienced teachers having the scholastic requirements may be appointed only when experienced teachers are not available.

4. Elementary teachers and kindergarten teachers must be at least graduates of the advanced course of a State Normal School. Beginning teachers without actual experience, who are graduates of at least a three years' course in a State Normal, may be given credit for one year's teaching experience and consequently started at a salary of \$72.50 per month.

5. At least one year of the required professional training must be adapted to prepare especially for the work that the candidate is to undertake.

6. The maximum salary of grade teachers holding only one year elementary normal diplomas is \$90.00 per month. It is understood that such teachers will secure advanced course diplomas within a reasonable time.

High school teachers will be given a minimum of \$85 per month, with increases of \$7.50 per month up to a maximum of \$150 per month. Teachers who do exceptional work may be given further increases up to a final maximum of \$165 per month.

1. Beginning high school teachers with one year of successful teaching experience in an approved high school may be started at \$92.50 per month; those with two years' successful teaching experience may be started at \$100 per month, and those having more than two years' successful experience may be started at \$107.50 per month.

2. To be eligible for appointment high school teachers must be graduates of an approved four-year collegiate course, and must have made special and adequate study of the subject or subjects to be taught.

3. Inexperienced teachers may be appointed only when teachers of experience are not available.

Supervisors' and Special Teachers' Salary Schedule.

1. Supervisors and special teachers come under the High School Teachers' Salary Schedule except that the minimum salary of supervisors will be not more than \$140 per month.

2. Supervisors and Special Teachers must be especially trained for the work they undertake and in addition must have the qualifications required of high school teachers or the equivalent. Approved business or trade experience of a kind especially for the subject or subjects to be supervised may be accepted as an equivalent to not more than one year of required educational preparation beyond that of a secondary grade.

Principals' Salaries.

Principals in buildings having twelve to sixteen rooms will be given a minimum ranging from \$125 to \$150 per month, with increases of \$10 per month until a maximum of \$165 per month is reached. In buildings of from seven to eleven rooms, a minimum of \$100 to \$120 per

month will be given, with increases of \$10 per month up to a maximum of \$150. In buildings of less than five rooms, principals will receive from \$90 to \$100 per month, with increases of \$10 per month up to a maximum of \$125 per month. In the high school, principals will be given a minimum ranging from \$150 to \$170 per month, with increases of \$10 per month up to a maximum of \$190. The maximum may be further raised thru an increase of \$20 for special merit. Assistant principals and teachers in charge are to receive the salary of a grade or high school teachers, plus \$10 per month.

All grade principals must have the minimum qualifications demanded of grade teachers in addition to special training and experience for the principaship. Preference is to be given to those qualified beyond the minimum requirements.

To make the regulations complete, a number of additional specifications relative to qualifications and professional improvement are given as follows:

1. Evidence of professional improvement must be shown each year by teachers in addition to success in classwork to warrant an increase of salary. Means of improvement are to be outlined by the Superintendent.

Teachers and Principals who qualify for the special individual merit maximum must show evidence of professional growth and unusual success in the work.

2. All teachers and supervisors, beginning with the summer of 1919, will be obliged, at least every four years, to do summer school work equivalent to a six weeks' course at some approved school. The work must be approved by the Superintendent of Schools and must be along the line of the work of the teacher in our schools. Teachers who have not attended a six weeks' summer course or equivalent, for four years or more, will be obliged to attend during the year 1919.

3. Teachers will be elected in March and the Superintendent in February.

4. All teachers will be obliged to board and room in South St. Paul during the school year, with the exception of one school.

5. Grade substitutes will receive \$3 and \$3.50



\$6.00 in prizes
for School Children

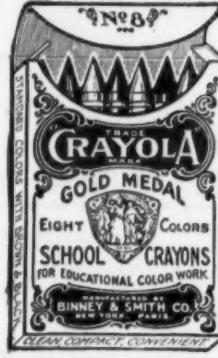
8 First Prizes - - - Each a \$50.00 Liberty Bond
8 Second Prizes - - Each \$25.00 in War Saving Stamps
40 Additional Prizes - - - for Honorable Mention

Tell the Children in Your Class About the
"CRAYOLA" Drawing Contest

—for Children under 15 years of age
—for Young People 15 to 18 years of age

See the children in your class settle down to serious drawing work—open their minds to drawing instruction—give them a prize to work for. Send to us for the details of the "Crayola" Drawing Contest. "Crayola" No. 8 is the standard school set.

BINNEY & SMITH CO.
Makers of the Gold Medal Crayons
81-83 Fulton St. New York, N. Y.



a day and high school substitutes \$3.50 and \$4.00 a day, according to success and experience.

6. In case of illness of principal or teacher, five full days' salary is allowed and an additional fifteen half days' salary during the school year. In case of absence on account of death in the immediate family three full days' salary is allowed.

New York, N. Y. The board has granted substantial increases in salary to teachers from the kindergarten to the sixth grade. The schedule provides for a salary of \$1,000 for the first three years, \$1,100 for the next two years, \$1,200 for the following two years, \$1,300 for the eighth year, \$1,400 for the ninth year and \$1,500 for the tenth year.

Allentown, Pa. The maximum salaries of grade teachers have been raised from \$80 to \$85, \$90 to \$100, and \$100 to \$110.

Elementary teachers who have completed a four-year high school course hold a provisional certificate and have taught substitute for two years will receive \$60. After two years' successful teaching this will be increased to \$65. A teacher holding a normal certificate without having completed a high school course will receive \$65. After two years' successful teaching this will be increased to \$70 and an annual increase thereafter at the rate of \$5 until \$95 has been reached. A teacher holding a professional certificate and having completed a four-year secondary course and holding a normal certificate will receive \$65, and after two years' successful teaching in the district this will be increased to \$75, and thereafter at the rate of \$5 a month until \$95. A teacher holding a professional certificate will receive \$70 a month, to increase annually \$5 per month until \$90 has been reached. This depends on two years' successful teaching in the district. A teacher holding a permanent state certificate and who has taught successfully in the district four years will receive \$85. This will increase for every additional year until \$95 has been attained. A grade teacher holding a college certificate will receive \$80, this to increase annually at the rate of \$5 until \$100 has been reached. The minimum salary of teachers in the

continuation school will be \$10 more than for teachers in the junior high; this will increase annually \$5 per month.

Teachers who have state certificates and who have taught one year at the maximum salary of their class shall receive an additional increase of \$25 for every 72 hours of college credits obtained in not more than two professional and academic branches, such as education, English, literature, history, modern language, science, etc., until the amount of \$1,050 a year is reached in the first six grades; \$1,250 junior high school and seventh and eighth grades and \$1,600 teachers of high school. Provided, however, that for teachers of elementary grades and the junior high school such special increase shall not exceed \$50 in one year, and for teachers of high school shall not exceed \$100 in one year.

The supervisor of the Junior high schools, including all grades constituting the junior high school, will receive \$2,100 per annum and are elected for three years.

The minimum salary of the general supervisor in the grades below high school will be increased at the rate of \$10 per month annually until a maximum of \$150 has been attained for primary and intermediate grade supervisors.

The minimum salary of the supervisor of music, drawing or domestic science shall be \$5 a month more than the maximum for teachers in the grades under the supervisor's charge. This shall be increased annually at the rate of \$10 per month until \$150 has been reached. The minimum salary of the assistant supervisor of music, drawing or domestic science will be \$100 per month, to be increased annually at the rate of \$5 per month until the salary has increased to \$125. The supervisor of physical instruction in the elementary and junior high school will receive \$150 per month, to increase annually at the rate of \$10 until \$180 has been reached.

The salary of the teacher in Class A of high school was set at \$110, to increase at the rate of \$5 a month annually until \$150 has been reached.

Class B. shall receive \$100, to increase annually at the rate of \$5 until \$150 has been reached. Classes C and D, salaries entitle the teacher to

IT is easy to do good work if you have the right things to work with, and that is why so many schools use Devoe School Water Colors.



Devoe School Water Color Box No. 118

Made in cakes, pans and tubes.



Devoe School Water Color Box No. 122

Everything for school art work, including modeling material, Devoe Show Card Colors, Brushes and other supplies can be had at a Devoe dealer or

Devoe

New York Chicago Kansas City

New Orleans

the amount the teacher was entitled to in the grade or junior school from which promotion was made. This increases annually at the rate of \$5 a month until \$140 has been attained.

The minimum salary of the teacher in class A, B and C of the junior high school, or seventh and eighth grades shall be \$85 per month, this to increase annually at the rate of \$5 per month until \$115 has been reached by class A and \$105 by classes B and C.

The salary of the principals of elementary school buildings shall be the regular annual salary for grade taught plus \$12.50 for each room in the building.

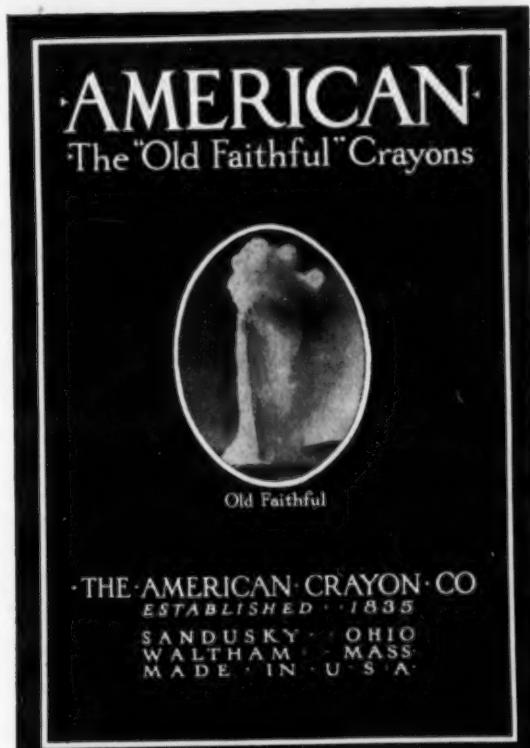
Special ungraded teachers for subnormal children will be paid \$5 more than the applicant would be entitled to as a regular grade teacher, this to increase annually at the rate of \$5 per month until \$150 has been attained.

The recent dispute over salaries between the teachers and the school committee of Haverhill, Mass., threatened for a time to deprive the school system of some of its best teachers. The situation was saved thru the reconsideration of the salary increases and the decision to make the increase general.

Teachers' agencies which make it their business to provide instructors for vacancies have been conducting a campaign in an effort to have teachers in cities where the pay is small, leave and accept positions in centers where the pay is better. The agencies have foreseen the clamor for increased wages and have realized that some cities which will refuse to grant increases, may thus turn over some very efficient teachers to them with chances for greatly increased salaries.

Since the first of February, 1917, the maximum for teachers in the first six grades has been advanced from \$65 to \$83 per month—an increase of 27.6 per cent. The maximum for seventh and eighth grade teachers has been advanced during the same period from \$70 per month to \$85 and for assistant principals from \$75 per month to \$90. Kindergarten directresses have been increased from \$55 to \$65 per month.

The total monthly pay roll for teachers has increased 16 per cent from the first of February, 1917, to the first of April, 1918.



TEACHERS AND ADMINISTRATION.

Alien teachers of Minnesota are barred from schools of all kinds by a recent order of the State Public Safety Commission. The rule reads:

"No person who is not a citizen of the United States shall be qualified to serve as a teacher in any public, private or parochial school or in any normal school in which teachers for these schools are trained, but the state superintendent of education may grant a permit to teach to an otherwise qualified teacher who has made a proper declaration of intention to become a citizen or to a special teacher to be employed for technical work for such period as the superintendent of education shall designate."

"The state superintendent of education is authorized and directed to enforce and carry into effect this order."

Bay City, Mich. The board has adopted a recommendation that no teacher be employed who is not willing to subscribe to a printed form in which loyalty to the United States is solemnly pledged.

Teachers who are granted leaves of absence for gaining additional knowledge thru study or travel, may be given half pay during absence, according to a recent opinion of Corporation Counsel Rann of Buffalo. Mr. Rann points out that the board can protect itself by requiring such teachers to sign an agreement that they will return to the service.

Bakersfield, Cal. The board has adopted rules providing that no married woman be employed in the schools, except in the case of the wife of a soldier or sailor, or in the event of an emergency; teachers who have taught thirty years will be pensioned. Twelve teachers are automatically dropped thru the operation of the rules.

A nation-wide canvass of married women teachers has been begun by the Institute for Public Service, New York City, which is calling on school superintendents to assist in compiling a list of married women teachers and facts about their experience and observation as teachers.

In the questionnaire, teachers are asked to state whether they would advise any school board to obtain qualified married teachers whenever

possible and whether they feel that there is something about being married that is harmful to teaching, helpful, or of no effect on teaching.

The teacher is asked whether she is employed, whether she has taught in day or night school, number of years of teaching before marriage and since marriage, and whether she kept house while teaching. Other questions asked are:

"As you have known the work of other married teachers, do you feel that being married, apart from having children to think of, caused their teaching to be better or worse?"

"Do you think that in your own case, or in that of any other married teachers, having children to care for, increased or decreased teaching efficiency?"

The Rhode Island State Board of Education has adopted a rule providing that no person shall hereafter be granted a teacher's certificate until he or she has signed the oath of allegiance to the United States.

Yakima, Wash. The school board has refused to rescind a rule directed against married women teachers. Exception is made, however, in the case of widows and women who may be compelled to work while their husbands are in the government service.

Sacramento, Cal. Married women teachers whose husbands are in government service, will be retained as teachers for the next year.

Boston, Mass. The board has suspended the rule against married women teachers in the case of Helen A. Finn, a teacher of sewing, who was married recently to Arthur J. Kelly.

The school board of Boston has raised the standard of requirements for teachers corresponding with the salary increase. It was ruled that kindergarten teachers shall hereafter present a diploma from a high school, in addition to giving evidence of one year's teaching in a kindergarten.

Worcester, Mass. The school board as a whole has ordered that school teachers be paid for forty weeks of service for the week beginning April first and also for the extra week in June.

Superintendents and principals of Indiana have been asked by the State Board of Education

to urge upon the members of this year's graduating classes that they take up the teaching profession in order that vacancies in the teaching staffs may be filled.

The Buffalo City Council has withheld approval of the proposed amendments to the teachers' pension bill, because of the dissatisfaction of the teachers. It was found that some of the amendments agreed to had not been incorporated in the bill.

The Michigan Superintendents' and School Board Members' Association, at its annual meeting in Ann Arbor, adopted resolutions requiring a pledge of loyalty from every teacher who signs a teaching contract.

New York, N. Y. Married teachers whose husbands have been drafted are to be given assignments in the schools as substitutes. The employment of married teachers has been made possible thru the suspension of the law for the period of the war.

Cleveland, O. Three thousand teachers have been given the following pledge for signature:

"I promise openly to espouse and defend American principles whenever and wherever they are called in question. Moreover, as a patriotic duty I promise to give information of any violation of this pledge."

Governor Whitman of New York, on April 5th, signed the bill providing that citizens only shall be entitled to teach in the public schools of the Empire State.

Radical changes in the methods of examining candidates for licenses to teach in elementary schools of New York City, have been approved by the board as a means of placing students from training schools and colleges. The chief features of the changes are simplification of examinations, holding examinations outside the city, granting credit in making up examination rating for classwork in training schools or colleges, and allowance for satisfactory work as substitutes. The changes are the result of facts gathered by members of the board of examiners and the principals of training schools relative to the probable supply of teachers and the salaries to be paid.

In days gone by—



before the importance of pure air was generally understood—schools were indifferently heated with old-fashioned stoves. We now realize that, if pupils are to have alert minds and healthy bodies, they must be supplied with an abundance of fresh air warmed to the proper temperature.

THE INTERNATIONAL ONE ROOM SCHOOL HEATER

is properly designed to fill this need. It is attractive in appearance, of durable construction and carefully planned to comply with the requirements of the various states having ventilation statutes.

Send for Catalog 4010

INTERNATIONAL HEATER Co.

MAIN OFFICE AND FACTORY

UTICA, N. Y.

Branches: NEW YORK CHICAGO NASHUA, N. H.



ISSUE CATALOG OF JANITORS' SUPPLIES.

Janitors' and Porters' Supplies form the content of a new booklet just issued by Albert Pick and Company, 208-220 W. Randolph Street, Chicago. The booklet is timely for school authorities who desire to place their annual summer orders.

The booklet, which is well illustrated, gives brief, accurate descriptions and plain prices of a considerable line of standard goods. The careful system of classification makes the booklet a reference guide for school board secretaries and a copy should be in every school board office.

NEW VICTOR RECORDS.

The Victor Talking Machine Company has just announced several new Victor records of value to schools.

The first in point of interest contains four American Folk songs rendered by Mrs. Maud Powell. Any Victor dealer will be glad to play the records for school authorities.

A BOOKLET ON CONCRETE FLOOR FINISHING.

The value of "Lapidolite" as a deterrent of wear and dust is strikingly illustrated in a new circular just issued by L. Sonneborn Sons, New York City. The circular contains illustrations of a large number of prominent buildings in which "Lapidolite" is used successfully for the treatment of old as well as new concrete floors.

For the benefit of the small number of school officials who are not familiar with the material, it may be said that it is a liquid chemical which acts as a hardener on any concrete surface to

which it is applied and renders it dust-proof, wear-proof and water-proof. By actual test, it has been found to increase the hardness of concrete to exceed that of granite. In school buildings, especially in playrooms, corridors and shops the material has been used for many years and is regularly specified by experienced architects.

"Lapidolite" is sold by special dealers in all sections of the country. The manufacturers, in addition to local sales service, maintain a corps of experts in the New York headquarters who are prepared to give special advice to school authorities and others. In considering the refinishing of old floors they are prepared to send experts to examine the premises and to make direct recommendations.

Correspondence may be addressed to L. Sonneborn Sons, 266 Pearl Street, New York City.

THE AMERICAN CREED.

The grandson of a former president of the United States, Walter Tyler Page, has prepared the most impressive expression of the American belief in democratic government which has appeared since the beginning of the European war. It speaks for itself:

The American Creed.

"I believe in the United States of America as a Government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign nation of many sovereign states; a perfect union, one and inseparable; established upon those principles of freedom, equality, justice and humanity for which American patriots sacrificed their lives and fortunes. I, therefore believe it is my duty to my country to love it, to support its constitution, to obey its laws, to respect its flag and to defend it against all enemies."

Copies of the quotation have been printed by the American Crayon Company and will be sent free to any reader of the SCHOOL BOARD JOURNAL who addresses the home office of the firm at Sandusky, O.

ONLIWON INDIVIDUAL—SANITARY

Paper Towels SATISFACTORY



There are no buttons to press, no knobs to turn that others may have handled—you take right hold of YOUR own INDIVIDUAL towel that no one else has touched when you use Onliwon Paper Towels, served from the sanitary, white-enameled

ONLIWON PAPER TOWEL CABINET

ONLIWON Paper Towels prevent the spread of disease and are more satisfactory in every way for use in schools. They do away with every objection to the ordinary Paper Towel. Use ONLIWON Paper Towels just as you do cloth towels—RUB and SCRUB your face and hands all you please. They are very absorbent—chemically pure and cannot injure the tenderest skin. ONLIWON Paper Towels are of generous size and do not dissolve to a handful of pulp when used.

And they SAVE from 15 to 50 per cent per user per year under all kinds of varying conditions

Your SCHOOL BUILDING IS LOSING MONEY every day the use of the old fashioned, unsanitary cloth towels is continued. Tell us the average daily attendance at your school and we will show you how little it will cost to install and maintain the ONLIWON Towel System.

A. P. W. PAPER CO.

1285 Broadway, Albany, N. Y.

ENTER SCHOOL BOOK FIELD.

A modest little pamphlet entitled "The Intellectual Approach to Business" announces the entry of the A. W. Shaw Company, Chicago, to the educational book field. The firm is known in the United States and abroad as a leading publisher of business magazines and general business books.

The Shaw Company has established itself by close adherence to the sound doctrine that business is based on fixed principles and universally applicable rules and that the methods of scientific research must be applied in the building up of a comprehensive business literature. In all its periodicals, pamphlets and books the authors and editors of the firm have been held to the method of approaching from the concrete—the fact basis—to the abstract and the generalized statement of principles and laws. The method has made the publications a perfect mirror of the newest business facts, of the best practices, customs and tendencies.

The new textbook series which the firm is projecting is to follow the general lines of its general publications. Four books have already been placed on the market. The authors are in each case experienced teachers who are thoroughly familiar with the Shaw ideals and policies. Business correspondence, advertising, bookkeeping, salesmanship, office methods are among the subjects to be treated.

The firm is establishing a complete educational department under the direction of Mr. T. S. Rockwell.

A CORRECTION.

The School Board Journal wishes to correct a mistake in the Pathescope Company's advertisement, on page 69 of the May number, in which it is stated that there are about one hundred "Premier" Model Pathescopes in the Schools of New York City. As the "Premier" is a new model, only recently introduced, the machines referred to were of the "Popular" Model, which this Company has been selling for four years.

Schools Everywhere Buy From Us

We can offer no better recommendation than to say that the following Schools and Colleges (and hundreds more) are customers of ours:

University of Chicago
Lewis Institute, Chicago
St. Xavier's Academy, Chicago
Lake View High School, Chicago

University of Wisconsin, Madison
University of Michigan, Ann Arbor
Parker High School, Dayton, Ohio
University of Missouri, Columbia

These educational centers have found that they can save much by purchasing their requirements from us. Below you will find SOME of the merchandise that you can buy from us at a saving. All our goods are the best that can be purchased in any market, and we guarantee them to give perfect satisfaction.

LUNCH ROOM EQUIPMENT



cost less than if you installed it yourself. We invite you to consult us. Let us tell you how much a lunch room will cost. Our representative will call if you are interested.

If you contemplate installing a lunch room, or if you already have one, we can be of service to you. We are the largest house in the country specializing in complete lunch room equipments. Operators of lunch rooms naturally look to us as the source of supply for the goods and service necessary for equipping and maintaining them. We can take your bare room and completely outfit it as a modern and up-to-date lunch room at a

DOMESTIC SCIENCE EQUIPMENT



We are in a position to furnish complete equipments for the study of Domestic Science for classes of any size. This branch of our business is handled by experts who have made a special study of it. Our cooking tables, sewing tables, teachers' demonstration tables, gas plates, gas ranges, refrigerators, kitchen utensils, linens, etc. are the best that can be obtained in any market, and are guaranteed to give satisfaction. Send us measurements and sketch of room you desire to furnish, advising us the size of class you are providing for, and we will have our expert submit sketch of room showing equipment installed together with itemized list giving prices.

Sweeping Compound



A superior compound for cleaning wood, tile and linoleum floors. It is a powerful cleaner, quick acting and thoroughly effective.

Write for CATALOG

Janitors' and Porters' Supplies



A complete line of equipment and supplies for porters and janitors. Our line is carefully selected, and is made up of quality goods that will give you the most service for your money. Besides the tools illustrated many others are listed in our catalog which will be sent free on request.

Write for CATALOG

Sanitary Supplies



Disinfecting fluids, deodorizers, urinal drip machines, rat, mice and bug killers, etc.

Write for CATALOG

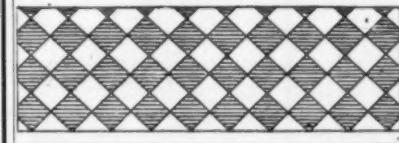
Mats and Matting



All kinds, including rubber, wood, steel and felt.

Write for CATALOG

Linoleum and Cork Carpets



Made to withstand the hard usage to which floor coverings are subjected in public places. We show many attractive patterns.

Write for CATALOG

Waste Paper Balers



We carry all kinds of balers, both wood and steel.

Write for CATALOG

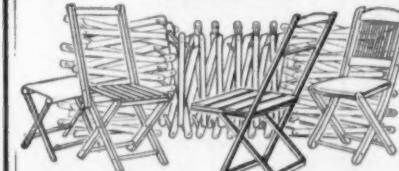
Decorative Goods



We carry decorations for all occasions, including lanterns, shields, eagles, etc.

Write for CATALOG

Folding Chairs and Stools



We carry a complete line of high grade folding chairs and stools. They are all of strong construction attractively priced.

Write for CATALOG

Toilet Paper and Paper Towels



Two of our big selling lines. We carry all grades and have what you want at right prices.

Write for CATALOG

TEAR OFF AND MAIL

ALBERT PICK & COMPANY
 208-220 W. RANDOLPH ST., 

CHICAGO, ILLINOIS

INQUIRY BLANK

PLEASE SEND CATALOG:

NAME.....

TOWN..... STATE.....

YOUR ADDRESS.....

I am in the market for the following:

TOWN.....
 (WRITE names of articles on bottom margin of page.)



"The New Junior High School at Futuria"

is to be supplied with Steel Lockers arranged in the corridors and adjacent courts; according to the second article of Mr. Price's very interesting series. Since everything is to be *ideal* it's pretty certain that the equipment will be

Berger STEEL LOCKERS

For they offer everything that can be desired in locker equipment—beauty, permanence, strength, simplicity and economy. Various types are offered to supply different needs and the unit system permits additions and rearrangements without loss or difficulty. Send for our new catalog Y-7 and let our engineers supply you with plans and suggestions.

The Berger Mfg. Co. Canton, Ohio

Branches: Boston, New York, Philadelphia, Chicago, St. Louis, Minneapolis, San Francisco.

Export Dept.: Berger Bldg., New York City, U. S. A.

ROBERTSON'S BRUSHES MADE FOR USE AND ABUSE

Do you know that we can supply you with anything and everything in the line of Brushes?

We are keeping up, as heretofore, the high standard of excellence, even during these times of extreme difficulty in obtaining genuine wild Russian boar bristles.

Our Bristle Floor Brushes

ought to be used in every school. They save labor and simplify the cleaning problem.

Every Brush bearing our name is guaranteed absolutely as represented.

We manufacture a complete line of Disinfectants, Liquid Soaps, Soap Powder, Scouring Powder, Cleansers and are headquarters for Paper Towels, Toilet Paper, Mops, etc.



Theo. B. Robertson Products Co., Inc.

700 West Division St.

CHICAGO, ILL.

BOSTON

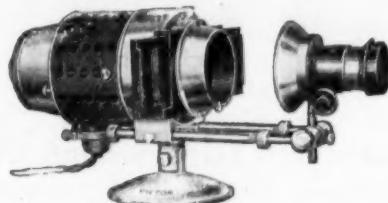
KANSAS CITY

DENVER

LOS ANGELES

Change the Slides

That's all there is to "operating" the



Victor Portable Stereopticon

The original Victor features that a few years ago made possible the popular use of lantern slides, have been further improved. The same solid cast aluminum construction is used. Service and genuine satisfaction is guaranteed.

Write today for information on the variations of lenses and lamps that provide for every need.

Ask for "trial-before-purchase" terms.

Victor Animatograph Company

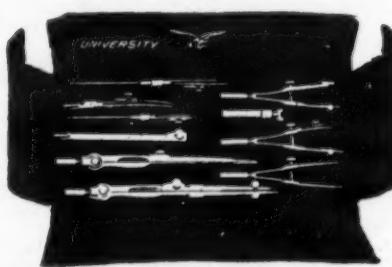
141 Victor Bldg.

Davenport, Iowa, U. S. A.

Post's Dependable Drafting Supplies

and Furniture are made in our own factory and supplied direct

The
BEST



For
SCHOOL
USE

NORWOOD DRAWING TABLES

and others made by "POST" are of the efficient type that encourage good work



Drawers
furnished
at
extra
charge

Catalogue
furnished

THE FREDERICK POST COMPANY

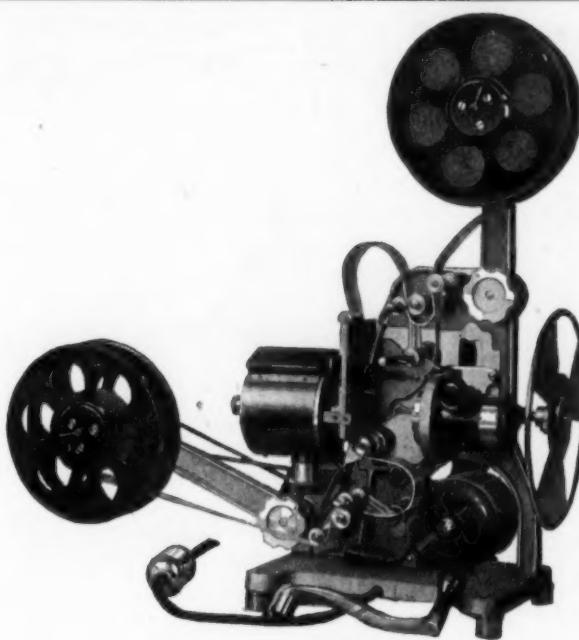
Manufacturers

CHICAGO

San Francisco, Cal.

Portland, Ore.

Los Angeles, Cal.



THE NEW
PREMIER PATHÉSCOPE
 WITH ITS SPECIAL, NARROW WIDTH
SLOW BURNING FILM

The ONLY Equipment Approved by
 Underwriters' Laboratories, Inc.,
 for Unrestricted Use ANYWHERE

The operation of certain other Portable Projector, using Standard Films, without a fire-proof enclosing booth is prohibited by State, Municipal and Insurance restrictions, and the violator is frequently subjected to severe penalties.

Safety First--Use the New Premier IN YOUR SCHOOL

There are more Pathescopes in Schools today than all other portable projectors combined, because they are designed particularly for SCHOOL use.

There are about one hundred "Popular" Model Pathescopes in the Public Schools of New York City, and the Board of Education has recently ordered a number of NEW PREMIER PATHÉSCOPES after a careful investigation of the merits of other portable projectors.

For the third consecutive year we have been awarded the contract for furnishing Pathéscope Educational Film Service to the New York Public Schools, on the recommendation of the investigation committee.

More Than 1200 Different Films Already in Our Library
 The Ideal Projector for Classroom or Auditorium Use

Write for Booklets:

"Education by Visualization." (5th Edition 100,000.)
 "Educational Films for the Pathéscope."
 "Endorsements of Educational Efficiency, Etc."

The Pathéscope Co. of America, Inc.
 Suite 1873, Aeolian Hall, New York

Agencies and Branch Exchanges
 Boston, Philadelphia, Buffalo, Pittsburgh,
 Chicago, Minneapolis, Salt Lake City



PERSONAL NEWS of SUPERINTENDENTS

Supt. John E. Alman of Belvidere, Ill., has resigned.

W. E. Chancellor, professor of social sciences at Wooster College, Wooster, O., has been employed by the School of Education, Western Reserve University, to teach summer classes in sociology and school hygiene.

Supt. Ira H. McIntire, of Muscatine, Ia., has been unanimously re-elected for a two-year term. Supt. McIntire is completing his seventh year at Muscatine.

Supt. A. J. Lovett, of Blackwell, Okla., has been re-elected for a three-year term. Mr. Lovett is completing his tenth year of service.

Supt. Wm. T. Gordon, of Coatesville, Pa., has announced his retirement with the close of the school year. During his long term of service, Supt. Gordon has witnessed many changes in the line of educational progress.

Dixon, Ill. Supt. J. H. Light, of Harvard, Ill., has been elected to the superintendency of the South Dixon schools, to succeed C. S. Bixler, resigned.

Dr. A. J. McKelway, noted leader in child labor legislation, died on April 16 at Washington, D. C.

Superintendent Minor McCool, of Greenville, Ohio, has recently been elected for a period of three years. The salary has been fixed at \$2,250, \$2,500 and \$2,750, respectively.

Mr. William Davenport, who has been superintendent of schools at Park River, N. D., since 1914, has been elected to the superintendency at Medford, Ore.

John R. Fausey, of West Springfield, Mass., has resigned to accept the superintendency at Winchester.

Supt. S. M. N. Marrs, of Terrell, Tex., has been unanimously re-elected for his twenty-fifth term.

Supt. F. W. Robbins, of Williamsport, Pa., has been re-elected and his salary raised to \$3,300.

Supt. Addison L. Jones, of West Chester, Pa., has been re-elected to serve a thirtieth term of work.

Supt. Charles E. Carter, of Franklin, Pa., has been re-elected for a four-year term.

Supt. R. E. Laramy has been re-elected head of the schools at Easton, Pa., for a four-year term.

Supt. Edward Sargent of Meadville, Pa., has been re-elected.

Supt. H. W. Dodd, of Allentown, Pa., has been re-elected for a four-year term.

Supt. C. N. McCune, of Uniontown, Pa., has been re-elected.

Supt. Atreas Wanner, of York, Pa., has been re-elected to serve his twenty-eighth term.

Supt. Samuel Weber of Scranton, Pa., has been re-elected for a four-year term.

Supt. Charles S. Poos, of Reading, Pa., has been re-elected for his fifteenth consecutive term.

Dr. Thomas S. March, formerly state inspector of high schools in Pennsylvania, has been elected superintendent of schools at Greensburg.

Supt. Joseph Howorth of Shamokin, Pa., has been re-elected for a term of four years.

Supt. J. W. Cooper has been re-elected head of the schools at Shenandoah, Pa.

Supt. James J. Palmer has been re-elected at Oil City, Pa.

Mr. H. J. Stockton, formerly principal of the high school at Johnstown, Pa., has been elected superintendent of schools to succeed J. N. Ade.

Supt. J. L. Allison, of Wilkinsburg, Pa., has been re-elected.

James N. Muir, of Rockville, Conn., has been elected superintendent of schools at Bethlehem, Pa.

E. R. Barclay of Pottsville, Pa., has resigned to accept the superintendency at Huntingdon.

Supt. J. C. Wagner, of Carlisle, Pa., has been re-elected.

R. G. Stephenson, head of the schools at Jerome, Ariz., has been elected dean of the Northern Arizona Normal School.

W. A. Geesey, of Hummelstown, Pa., has been elected superintendent of schools at Sunbury, Pa.

H. P. Study, of Neodesha, Kans., has been elected superintendent of schools at Atchison.

Supt. J. M. Layhue of Sumner, Wash., died April 10th at his home after a brief illness of pneumonia.

Supt. Frank L. Smart of Davenport, Ia., has been re-elected and his salary raised to \$4,800.

F. W. Hicks, of Ames, Ia., has accepted the superintendency at Clinton.

Dr. William L. Ettinger, associate superintendent in charge of vocational work for the schools of New York City, has recently been elected superintendent of the school system to succeed Mr. Wm. H. Maxwell resigned.

Dr. Ettinger was born in New York City. He is a graduate of Manhattan College and of the University Medical College. He organized the first class for the care of atypical or mentally defective children and was responsible for the operation of the first double-session schools which he formed in 1903. He was one of a party of educators who made a special trip to Gary to study the Gary school system and was responsible for the adoption of the Ettinger system.

He was elected district superintendent in 1909 and in 1913 was elected associate superintendent in charge of vocational work.

Wm. C. Greenwalt, of Lehighton, Pa., has been elected superintendent of schools at Carbondale.

Supt. John K. Baxter, of Canton, Ohio, has announced his resignation. Mr. Baxter was appointed in 1905 and had completed thirteen years of service.

Supt. I. M. Allen, of Springfield, Ill., has been re-elected.

Supt. R. J. Tighe, of El Paso, Tex., has been re-elected.

Mr. P. E. McClenahan, of Iowa City, Ia., has announced his candidacy for the Republican nomination for state superintendent of schools.

Dr. J. B. Richey, of McKeesport, Pa., has been re-elected for a four-year term. Dr. Richey's salary has been advanced to \$4,500.

Mr. T. T. Allen, of Vandergrift, Pa., has been elected superintendent of schools at DuBois, to succeed I. M. Gast resigned.

G. H. Weiss, principal of the high school at Pottsville, Pa., has been elected superintendent of schools to succeed E. R. Barclay.

Mr. R. Thane Cook, formerly principal of the high school at Phoenix, Ariz., has resigned to become head of the physiology and educational departments of the Northern Arizona Normal School.

Miss Mabel Carney, formerly supervisor of teacher training for the Minnesota Department of Education, has resigned to accept a position at Teachers College, Columbia University.

Mr. Harvey S. Gruver, assistant superintendent of schools at Indianapolis, Ind., has been elected superintendent of schools at Worcester, Mass.

Supt. F. H. Barbee, of Nevada, Mo., has been re-elected for a seventh term, at an increased salary of \$2,500.

C. E. Stephens, principal of the high school at Nevada, Mo., has been elected superintendent of schools at Paris, Mo.

Supt. L. H. Minkel, of Fort Dodge, Ia., has been given an increase in salary to \$4,000 per year.

Supt. I. B. Bush of Erie, Pa., has been re-elected for a four-year term, at a salary of \$5,000 per year. Supt. Bush came to Erie from Parkersburg, W. Va., in 1914 and gradually but surely built up the school system to its present high level. Supt. Bush is responsible for the introduction of printing, sheet metal work and electricity and for the building up of the household arts and manual arts work to its present enrollment of 3,477 pupils.

Supt. Bush undertook a study of the night school problem which he enlarged in scope, later introducing short unit courses in household and manual arts.

In the high school the enrollment has increased 88.7 and in the grades 26.7 per cent. The standards for promotion have been raised without the necessity of radical changes in the system. A system of summer schools was worked out, the grade schools were departmentalized and the course of study from the grades to the high school was reorganized to fit the needs of the children. A system of measurements and tests for measuring the classroom work was worked out with some very interesting results.

April 26th was observed as "Coughlin Day" in the public schools of Wilkesbarre, Pa., with every school in the city paying tribute to Supt. James M. Coughlin who for the past 27 years has been at the head of the system. Special programs were given in each of the buildings which emphasized by impressiveness the regard in which the retiring superintendent is held.

Supt. E. L. Haynes of Melbuen, Mass., has been re-elected at a salary of \$2,500. During Mr. Haynes's six

Heating and Ventilation of Schools THE AMERICAN SYSTEM

Economic
Heating

Established By
Years of Satisfaction
THE STANDARD FOR SCHOOLS

Scientific
Ventilation



EAST MILWAUKEE HIGH SCHOOL, EAST MILWAUKEE, WIS.
Using American System

The American System complies with State Laws

The Coldest Winter in 50 Years has again demonstrated the RELIABILITY of the "AMERICAN SYSTEM" under the most severe conditions. Nothing to freeze or explode.

There is an "American" Sales Engineering Service Office in your locality.

School Authorities appreciate American Quality and Service.

WRITE US YOUR REQUIREMENTS

American Foundry & Furnace Co.
Bloomington, Ill.

years of service, six schools have been built, the teaching force has been increased from 62 to 86 and the number of children has increased from 2,000 to 3,000.

J. M. Alleman, retiring superintendent of the schools of Greensburg, Pa., was recently given a testimonial of esteem by the teachers, pupils and parents of the school district. Mr. Alleman was presented with a watch, gold scarf pin and a gold handled knife, the gifts of the pupils and teachers.

The salary of Supt. D. Walter Potts of East St. Louis, Ill., has been raised to \$3,600.

Supt. Burton E. Nelson, of Racine, Wis., has announced his retirement at the close of the school year. Mr. Nelson has accepted a position as district manager for the Keystone View Company of Meadville, Pa. He will make his headquarters for the present at Racine.

Wilson Hawkins of Newark, O., has been elected superintendent of schools at Canton. The election is for a four-year term and the salary is \$4,000 a year.

Supt. W. D. Vincent, of Blackfoot, Ida., has been re-elected for a ninth consecutive term and his salary raised to \$2,800.

DEATH OF SUPT. STEELE.

William L. Steele, superintendent of schools at Galesburg, Ill., for the past thirty years, died at his home in Galesburg on May 5th. Mr. Steele's resignation as superintendent was tendered in January and was to have gone into effect at the close of the school year in June.

Supt. Steele became head of the Galesburg schools in July, 1885. He was a graduate of Monmouth College and of Knox College.

During his long service, Mr. Steele witnessed a steady growth in school attendance, buildings and teaching corps. In 1911 he prepared, at the request of the board, a History of the Public Schools of Galesburg covering the period from 1861 to 1911. Thru his long personal touch with hundreds of teachers in the schools he had a great influence on the instruction and supervision which was conducted under his leadership.

Mr. Steele was a true leader; he anticipated changes and improvements in organization, in methods and in the scope and content of the course of study. His leadership extended not only to the spiritual and pedagogical affairs of the schools but also to the physical and material. His ideas were worked out in the school plant, in the business methods of the schools and in the financial affairs of the school district.

It is a rare sign of strength and efficiency in a school administrator to get along well with school boards, with teachers, with children and citizens and still to maintain an aggressive leadership.

Mr. Steele was one of those unusual men who gathers strength and security in public office as time goes on and to whom difficulties and criticism are a help rather than a hindrance. He was warmhearted and kindly and performed all his public duties with such tact and friendliness that his enemies were those whose opposition could be pointed to with pride.

CONSERVE FUEL—"WINDUSTITE" YOUR WINDOWS AND DOORS



RICE SCHOOL, CLEVELAND, OHIO

This is only one of the hundreds of school buildings equipped with the Patented American "Windustite" All Metal Weather Strips that prevent drafts, dust, soot and storms from entering the building.

By their use the temperature is uniform throughout the building; the pupils sitting near the windows are as comfortable as the rest.

They last as long as your building, but the saving in coal will pay for them in a short time. This should appeal to the man who pays the bills.

Particulars and estimates cheerfully furnished.

AMERICAN METAL WEATHER STRIP CO.

Home Office and Factory: - Grand Rapids, Michigan
OUR BRANCH OFFICES FROM COAST TO COAST PLACE OUR SERVICE
WITHIN REACH OF ALL.

increases amount to about ten per cent. Herman Wimmer will remain as superintendent of both high school and the grades.

The Chicago school board has rescinded its rule granting a bonus of \$50 to teachers of German in elementary schools.

At a recent meeting of the senior classes of the Cincinnati High Schools, a resolution was adopted providing that all preparations for commencement exercises be made in the spirit of sacrifice, thereby embodying simplicity, and moderation, eliminating all undue expense. It was ordered that graduation dresses be simple and inexpensive, that no flowers be worn and that announcement cards be printed on the school presses.

Bozeman, Mont. The girls of the three lower high school classes have adopted a resolution providing for a standard dress for girl students. The change is intended as a war measure and as a step toward simplicity in dress.

HIGH SCHOOL ADMINISTRATION.

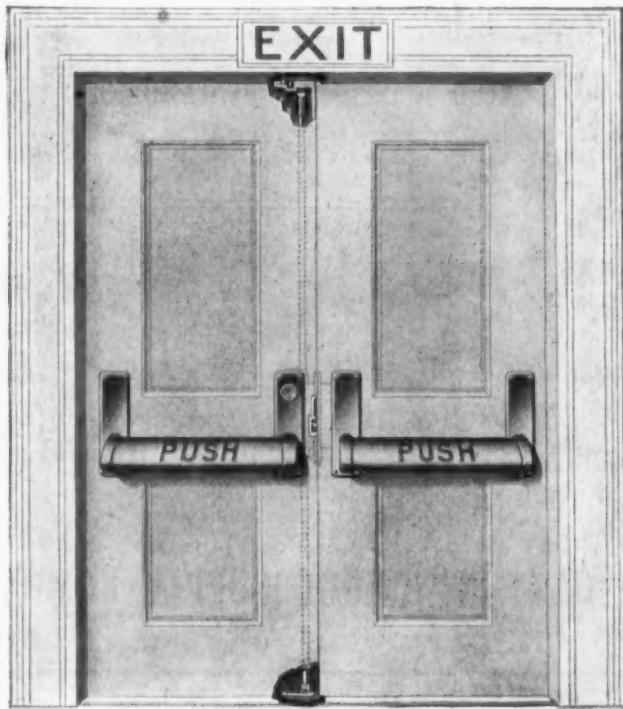
(Concluded from Page 42)

El Paso, Tex. A spacious and well equipped lunch room is maintained in the high school for the benefit of the students. The lunch room accommodates 850 students and a wholesome lunch can be obtained at the small price of twenty cents. A recent complaint on the food, prices and service of the lunchroom has been found, with one exception, to be without reason. The variety of food offered is limited due to the expensive character of certain articles and the necessity of keeping the prices down to five and ten cents.

The school boards of East and West Aurora, Ill., are considering the consolidation of the two districts which exist within the city as a war necessity. The districts which recently met in joint session for the first time, undertook a special study of finances looking to the payment of expenses and the remodeling of existing buildings. At present the assessed valuation of property on the east side is much larger than on the west side and the larger share of the taxes goes to the east side. The west side board has all of its fund practically used up while the east side board has a substantial balance.

Safety provided in every point

Quick exit is assured and the construction is such that in operating the push bar the hands or arms cannot be caught between the bar and the door.



These New

SARGENT

Reg. U. S. Pat. Off.

Fire Exit Door Bolts

are attractive in appearance, strong in construction and quick in action.

They have a wide push bar which projects only $2\frac{1}{2}$ inches from the surface of the door, permitting the door to swing wide open so as not to obstruct passage through the doorway. Slight pressure on the bar at any point will release the bolts instantly. All edges and corners on the bars and brackets are carefully rounded, eliminating all possibility of wearing apparel becoming accidentally caught.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

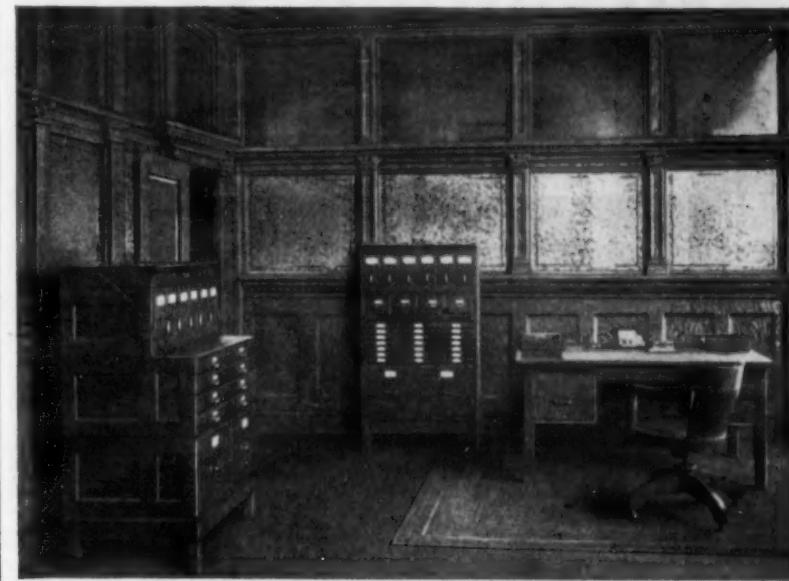
SARGENT & COMPANY, Manufacturers

New Haven, Conn.

New York

Boston

Chicago



Fine office equipment in steel, oak and mahogany. Filing systems and supplies for use with every kind of cabinet.

Fine Office Equipment for Schools and School Officers

If you want to become acquainted with the newest types of office systems and equipment used in your particular kind of work, whatever that work may be, step into the "Y and E" store in your city, or let us send a representative of "Y and E" System Planning Service to show you.

There is one best way to file your correspondence—to keep your records—to take care of blueprints, N. E. A. cards, purchase records, ledger cards, etc. That is our business—to show a man what will give him the best records of his work, and then make those records instantly accessible for him.

There is no charge for our System Planning Service. In fact "Y and E" equipment plus "Y and E" Service often costs less than other office equipment with no service at all. And as to "Y and E" quality—judge it by any of the hundreds of thousands of "Y and E" files that are still in use after fifteen to thirty-five years of service.

YAWMAN AND ERBE MFG. CO.

619 St. Paul St., Rochester, N. Y.

Makers of "Y and E" Filing Devices and Office Systems

BRANCH OFFICES: Boston, Springfield, Mass.,

New York, Albany, Newark, Philadelphia,

Washington, Pittsburgh, Buffalo, Cleveland,

Chicago, Kansas City, San Francisco, Oak-

land, Los Angeles. (Agencies and dealers

in more than 1,200 other cities.) In

Canada: The Office Specialty Mfg.

Co., Ltd., Newmarket, Ont.



Office Systems
That Simplify

Equipment like "Y and E" is the only conceivable kind for an office like yours. It is going to be seen and used for years after it is paid for. It is going to cut down permanently the cost of keeping your records. Year in and year out it is going to keep those records

up-to-date and strictly accurate and instantly findable. And incidentally it is going to make a permanent saving in your floor space—and to prove visually your up-to-dateness to everyone who enters your doors.

There's no equipment like "Y and E" except "Y and E". Deal with the "Y and E" store or accredited representative and you'll be well looked after. Local address and literature showing the newest types of equipment on request. Indicate line of interest on coupon and mail it to us.

COUPON

"Y and E"

Rochester, N. Y.

Without charge or

obligation please send

information about items

checked X. System

Planning Service, N. E. A.

School Card Systems, Vertical

Filing Systems, Steel Filing

Cabinets, Wood Filing Cabinets,

Efficiency Desks, Blueprint Files,

Steel Shelving Systems, Shanno

"Arch" Files, Card Systems for

(purpose)

Write name and address in margin. Attach to letterhead.

MR. SCHOOLMAN

PALMER'S CAN'T SPREAD ERASER



IS ONLY ONE OF THE MANY ARTICLES WE MANUFACTURE

We know it to be the most satisfactory eraser on the market. We want to prove to your satisfaction that the patented construction (not tape bound) makes spreading impossible, yet unlike a tape bound eraser the cleaning surface is soft and pliable. It gathers the dust instead of remaining on the surface of the felts, smearing the blackboards.

SAMPLES FREE

**Specify This Better Eraser
You Cannot Be Disappointed
We guarantee perfect satisfaction**

If your dealer will not supply you

DON'T TAKE A SUBSTITUTE

We Will Supply You — Through Our Nearest Dealer

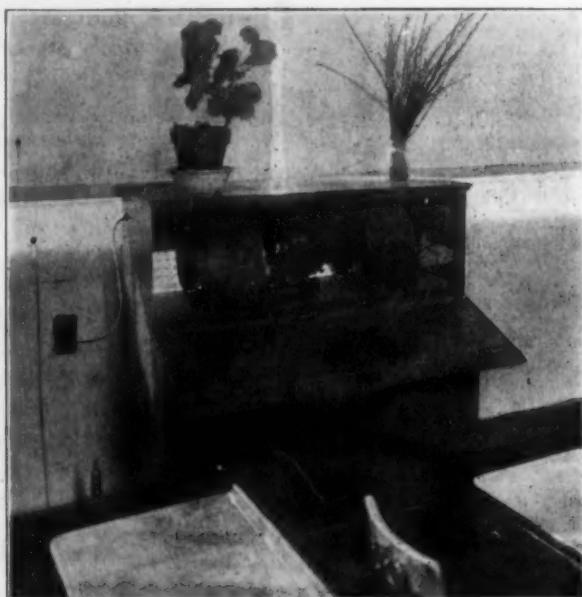
ASSOCIATED MFG'R'S C

Manufacturers of SANITARY PRODUCTS,
SCHOOL, JANITORS AND INSTITUTION SUPPLIES

Catalog sent on request

Main Office and Factory
AMCO BUILDING MILWAUKEE, WISCONSIN

**VENTILATION IS ESSENTIAL TO
HEALTH AND COMFORT**



YOU cannot ventilate your schoolroom properly by merely opening a window. The air must be taken into the room from out of doors and circulated thoroly, without draught, and the foul air must be discharged from the room at the same time.

The Peerless Unit System of Ventilating and Heating secures an adequate system, installed and supervised by experts.

Our Engineering force is at your service.

PEERLESS UNIT VENTILATION CO., Inc.
521-523 West 23rd St. NEW YORK

A WAR TIME ECONOMY

The Caxton Side Bound Eraser
Lasts Longer--Cleans Better



AVERTS SPREADING

No extra charge for the side binding.

CAXTON REINFORCED BLACKBOARD

is the ideal blackboard for your school. Is made in three colors—green, brown or black. Guaranteed to give entire satisfaction.

Surface is peculiar to this board. Ground slate troweled on in four coats. Made only to order, to fit wall space.

Has a perfect writing surface, erases easily and thoroly and does not become shiny.

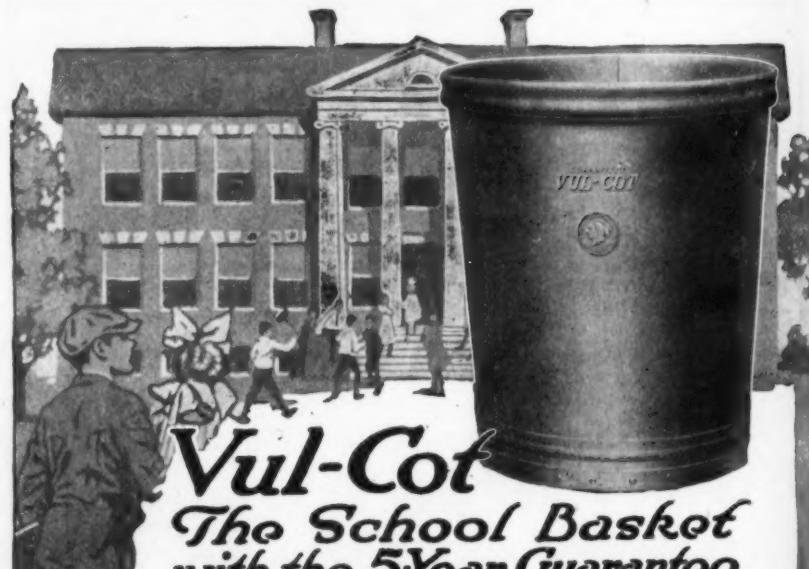


Write today for full particulars.

THE CAXTON SCHOOL SUPPLY COMPANY

560 W. Monroe St.

Chicago, Ill.



Vul-Cot
*The School Basket
with the 5 Year Guarantee*

If you look for durability and neat appearance at a reasonable price, you will find these qualities in Vul-Cot Waste Baskets.

These dependable baskets have been chosen by the public school boards of such cities as Philadelphia, Boston, Detroit, Pittsburgh and St. Paul because Vul-Cot is strong and durable, light and sanitary, good looking and serviceable and guaranteed.

Vul-Cot Baskets will not sag or dent, nor will they split, crack or corrode. They are fire-resisting. The sides and bottoms being solid, nothing can get through to muss up the floor.

In every respect you will find Vul-Cot School Baskets an unusually good value.

If your stationer or school supply house is not yet carrying them, write to us for bulletin.

AMERICAN VULCANIZED FIBRE CO.

520 Equitable Bldg.,

Wilmington, Delaware

CANADIAN DISTRIBUTORS

A. R. MacDougall & Co., Ltd.
268 King St., W., Toronto, Ont.



You are responsible for our children's eyes



Holophane Superficiency Reflector
Used in many well-lighted schools

A child spends at least eight years of its life in school—many spend more.

Numerous cases of permanently defective eyesight are developed in this formative period—often because of bad lighting in the classroom.

It is for you school superintendents, you members of school boards, to look after the children's eyes.

A periodical inspection by doctors and nurses is good, but it does not solve

the problem. You must eradicate the cause, then you will cure the result.

Give the children good light.

You can make artificial light equal daylight. In most cases it can be done at a saving over your present cost for current.

Send for our free booklet, "Scientific Illumination for Schools." It will tell you how you can get better light for less money.

Holophane Glass Co.

Dept. F 14

340 Madison Ave., New York

Book Reviews

The Adventures of Oliver Twist.

By Charles Dickens; edited with introduction and notes by Frank W. Pine. Cloth, 472 pages. Price, 25 cents. The Macmillan Company, New York.

It is interesting to note that "Oliver Twist" was written for Bentley's Miscellany, a monthly magazine, which was started for this purpose in 1837 under the editorship of Dickens himself. This handy pocket edition includes a brief outline of the life of Dickens and notes which make it of particular value for school use.

Perils of the Bush and Other Tales.

By Isaac Pitman. Paper, 53 pages. Price, 30 cents. Isaac Pitman and Sons, New York.

These wellknown tales are here reproduced in the authentic Isaac Pitman elementary style of shorthand.

A Practical French Course.

By Leopold Cardon. Cloth, 463 pages; illustrated. Price, \$1.25. Silver, Burdett and Company, Boston, New York, Chicago.

The most valuable feature of this book is the author's combination of grammatical and vocabulary building exercises in *petit scenes* of interest to American teachers and pupils. The volume is built around a combination of the direct and the grammatical methods and the author shows fine discrimination in emphasizing the typical difficulties of the language which are stumbling blocks to Americans. The book is by no means an easy or a brief course, but a thoroly, practical, scientific course for advanced high school and beginners' college classes. The pronunciation drills are especially well selected and the idiomatic and commercial expressions are adequate.

The picture opposite page 206 is unfit for stu-

dents and should be replaced by another view of the garden of the royal palace. It is just this type of picture that gives Americans a false notion of French life and morals.

Principles Governing the Retirement of Public Employees.

By Lewis Meriam. Cloth, 477 pages. Price, \$2.75 net. D. Appleton and Company, New York.

In these days, when economic interests are defined into a recognition of the humanitarian, when human efficiency is promoted with a due regard for the physical man, and the sociologist has become a factor in industrialism, an exhaustive discussion on pension retirement funds is timely.

The work in hand deals with every phase of a subject which is still in its formative stages in this country. The National Government deals with the pensioning of soldiers, the municipalities have placed the police and firemen under similar protection, and retirement funds for superannuated teachers have been created everywhere.

The government has paid compensations directly out of appropriations and has not contended against deficits or other financial difficulties. On the other hand, police, fire and teachers' pension funds, organized upon a contributory basis, have met with reverses if not disaster.

The author of this book discusses with a surprising thoroughness the essentials involved in the problem. He points out clearly that actuarial experience must control where a contributory plan is devised. While he deals with employees in the service of the government, he nevertheless covers the entire range of pension problems and draws conclusions applicable to any system of retirement or pensioning.

Those engaged in a study of the subject or confronted with the problem of reconstructing impaired retirement funds will find this volume much serviceable.

The Child's Food Garden.

By Van Evrie Kilpatrick. Cloth, 64 pages, illustrated. Price, 48 cents. World Book Co., Yonkers, N. Y.

Simple directions and a splendid arrangement

by which one garden process is illustrated and described on each page, are the chief features of this book. The author gives evidence on every page of his thoro understanding of the pedagogical problems involved in teaching gardening and of his wide knowledge of conditions thruout the country. The book has well arranged planting tables for vegetables and fruit and a canning and drying table. The mechanical makeup of the book is delightful.

Hints on Teaching German.

By Walter Rippman. Cloth, 95 pages. Price, 50 cents, net. E. P. Dutton and Company, New York.

The pith of this little book is in three principles. The substance of these principles is that in teaching a modern foreign language attention must be given to *pronunciation* from the outset—teachers must have some practical knowledge of phonetics; the foreign language should be used as much as possible in teaching; grammar should not be regarded as an end in itself, but its elements, carefully selected, should be systematically taught, as the rules determining the relations of words to each other.

In this entirely re-written third edition is a running commentary to "The New First German Book"—noticed in the April number of the Journal—and to "The German Reader," by the same author.

A Foundation Course in Spanish.

By L. Sinagnan. Cloth, 278 pages. Price, \$1. The Macmillan Company, New York.

Why does the word foundation appear in this title? The author was formerly an instructor in Romance languages in the High School of Commerce, New York City. Here and elsewhere he found many students in his large classes who were not well-grounded in English grammar. From this experience this book has been gradually evolved. It has been the author's aim to simplify, so far as possible, the fundamental rules and principles of Spanish grammar; to introduce, one at a time, special pronouns, irregular verbs, different tenses, special idiomatic forms. The exercises seem practical and fuller than is usual in a book of this character.

IMPORTANT ANNOUNCEMENT

PUBLISHED IN 1917

ALDINE THIRD LANGUAGE BOOK

By Spaulding, Bryce, and Bushler.
For Grades Seven and Eight and Junior High Schools. Completes the series of three books covering the work in Grades Three to Eight.

ALDINE LANGUAGE METHOD: PART THREE

A manual for teachers using the Aldine Third Language Book.

PUBLISHED IN 1916

ALDINE READING METHOD, Revised Edition, 1916

By Spaulding and Bryce.
Primer, Book One, Learning to Read—A Manual for Teachers, Charts, and Cards.

THE ALDINE SPELLER

By Bryce and Sherman.

Four-Book Edition and Two-Book Edition. Grades One to Eight.

BUEHLER'S MODERN ENGLISH GRAMMAR AND COMPOSITION, Revised Edition, 1916

Employs the Nomenclature recommended by the Joint Committee of the National Education Association.

WEBSTER'S ENGLISH FOR BUSINESS

An important contribution on the subject by an expert. For Commercial, Technical, and other Secondary Schools.

NEWSON & COMPANY

73 Fifth Avenue, New York

623 South Wabash Avenue, Chicago

NOW READY HOME LIFE AROUND THE WORLD

BY
GEORGE A. MIRICK and BURTON HOLMES

A Supplementary Geographical Reader for the
Fourth Grade.

A SERIES of stories specifically emphasizing "home life" in various sections of the globe. In carrying out this plan, geographical situations have been selected that are typical in climatic and physiographic conditions, and in natural resources. The comprehensive picture thus given affords a new approach to the study of geography, giving a clearer understanding of the importance of geographical situations upon human life. Each chapter is based upon the writings of several travelers of authority and the text is illustrated with more than one hundred pictures taken for the most part by Mr. Burton Holmes, the well-known traveler and lecturer. The teaching equipment includes carefully prepared questions and suggestions for the pupils' study, as well as suggestions to the teacher useful in all her teaching of fourth grade geography.

Illustrated. 64 cents. Postpaid.

HOUGHTON, MIFFLIN CO., Boston New York
Chicago

Tales from Birdland.

By T. Gilbert Pearson; illustrated by Charles Livingston Bull. Cloth, 237 pages. Price, 60 cents. Doubleday Page and Company, Garden City, N. Y.

A lover of birds, of bird habits and haunts, has written these sketches. Fascinating word pictures show us the homes of ten different birds. No-Man's-Land, a small island off Maine's irregular coast, is the home of a gull, Hardheart. What a strong, selfish bird he was, what stirring adventures he had! Up and down the Hudson River and on the cliffs of the Palisades, a wily hawk does deadly work and outwits skilled marksmen. On a lake in far-off Oregon a widower, Baldpate, has his hap and mishaps. In the southwestern part of our great land, a little girl mothers a family of young quail, by gathering for them mesquite beans.

These bird tales, with the 35 pen and ink sketches and the eleven full-page ones, will make fifth grade children glad.

The Compleat Schoolmarm.

By Helen Hamilton. Cloth, 100 pages. Price, 65 cents, net. Longmans, Green and Company, New York, N. Y.

Local customs may mask, still they do not alter deeply-rooted traditions. Written by an English woman, written of life in a school for English girls, "The Compleat Schoolmarm" is really a protest against breathless, overloaded systems of teaching.

This expression of respectful sympathy and admiration has taken the form of a biography.

At the tender age of five a little girl enters a kindergarten. She later fairly glories in the work of the high school and woman's college which has a well-earned reputation for turning out "effective, brainy, learned, stern-eyed women." Her life as instructor in and head mistress of a girls' school is sketched with many an apt verb and adjective. Long days, late hours of work—sometimes needless work—defraud her, in the name of learning—of vivid youth and life.

Standards in English.

By John J. Mahoney. Paper, 198 pages. Price, 90 cents. World Book Company, Yonkers-on-Hudson, N. Y.

In these "Standards" the minimum requirements in English, oral and written, are definitely stated for each grade. Cultivation of the "sentence sense," of a good tone of voice, drill upon words commonly misspelled, commonly mispronounced, common errors in speech, are among the more pronounced requirements. Hints and helps for doing this work effectively are given for each grade. In part three is a finely-selected list of books. In the appendix is a picture list for each grade, also suitable drills and games.

Teachers may do more than is required, but they must keep everlastingly at their own requirements and make good the weak places in the work of the previous grade. This concentrated effort in each grade upon a few points will, it is hoped, graduate pupils from the eighth grade able "to talk or recite for a few minutes in an interesting way, using clean-cut sentences and good enunciation and to write an interesting

Pitman's Modern Language Series

Hugo's Russian Simplified. An Easy and a Rapid Way of Learning Russian. Cloth, \$1.45.

Hugo's Russian Reading Made Easy. 130 pp., cloth, \$1.10.

Pitman's Commercial Spanish Grammar. 249 pp., cloth, \$1.10. By C. A. Toledoano.

Hugo's Simplified Spanish. An Easy and Rapid Way of Learning Spanish. Cloth, \$1.45.

Hugo's Simplified French. An Easy and a Rapid Way of Learning French. Cloth, \$1.45.

Dictionary of Commercial Correspondence in French, German, Spanish, Italian, Russian and Portuguese. 718 pp., cloth, \$3.00. Containing the most common and ordinary terms and phrases.

Pitman's Commercial Correspondence in Spanish. 267 pp., \$1.10.

Spanish Commercial Reader. 170 pp., cloth, \$1.10.

Manual of Spanish Commercial Correspondence. 328 pp., cloth, gilt, \$1.50.

By G. R. MacDonald. Contains an extensive selection of commercial letters.

English-Spanish and Spanish-English Commercial Dictionary. 660 pp., \$1.50.

By G. R. MacDonald. A complete work of reference for students and teachers.

Taquigrafia Espanola de Isaac Pitman. Being an Adaptation of Isaac Pitman's Shorthand to Spanish. \$1.30.

For Further Particulars write

ISAAC PITMAN & SONS,

2 West 45th Street
NEW YORK

Publishers of "Course in Isaac Pitman Shorthand," \$1.50; "Practical Course in Touch Typewriting," 85c; "Style Book of Business English," \$1.00; adopted by the New York Board of Education.

AN IMPORTANT NEW BOOK

Problems in Woodwork

By Edward F. Worst, Supervisor of Elementary Manual Training, Chicago, Ill.

This book is based on the recently revised Chicago course of study in manual arts and presents a complete series of projects for the sixth, seventh and eighth grades. Combinations of such materials as splint, raffia, reed, cane, rush, fiber and textiles with wood are offered so that the scope of the work and the number of processes are increased immensely. The book is in line with the latest industrial and vocational trend in manual arts. Fully illustrated.

Write for complete information to
THE BRUCE PUBLISHING COMPANY
206 MONTGOMERY BUILDING

MILWAUKEE, WIS.

McConnell's Maps of Ancient and Classical History

35 Maps in the Set. Size, 44x32 inches. Sold only in Sets
Price, \$35.00 per set

McConnell's Maps of Mediaeval and Modern History

35 Maps in the Set. Size, 44x32 inches. Sold only in Sets
Price, \$35.00 per set

McConnell's Maps of United States History

45 Maps in the Set. Size, 44x32 inches. Sold only in Sets
Price, \$35.00 per set

The only complete set of Maps published which covers these subjects.

MODERN SCHOOL SUPPLY CO.
327-331 South Market Street -:- CHICAGO, ILL.

paragraph of clean-cut sentences, unmarked by misspelled words and by common grammatical errors."

School and Home Gardening.

By Kary C. Davis. Cloth, 353 pages; 160 illustrations. Price, \$1.28, net. J. B. Lippincott Company, Philadelphia.

Boys, girls and the average adult gardener will consult this book with interest and profit. It gives exactly the information needed—when to plant the various crops—how deep and how far apart—the best varieties—the culture—the character of the soil required. Indeed, from the preparation of the soil to the gathering of the crops, every essential point seems to have been remembered and to have been ably handled.

Among the noticeable features are topics on beautifying grounds, care of indoor plants, garden calendars for different sections of the United States, score cards for fruits and vegetables, directions for keeping accounts, lists of farm literature. The 160 delightful illustrations, the clarity of style, the definite directions would seem to present the partial or complete failures many have met in the past. Work in arithmetic and language may often be based upon data furnished by gardens. Aside from additions to the table—additions not to be despised in these days—work in gardens not only strengthens muscles, but frequently steadies nerves.

Civil Government of Idaho.

By C. E. Rose. Cloth, 144 pages. Price, \$1.50. The Macmillan Company, New York.

(Concluded on Page 75)



Spencer clean it, then you know it is safe

Akron Sets an Example

AKRON, O., is the first large city to attain the distinction of having all its public schools equipped with vacuum cleaners—recognizing that the most sanitary equipment is the best form of economy.

This fine example of true care for scholars' health and taxpayers' money affords another striking testimony to the superiority of the **Spencer Vacuum Turbine Cleaner**.

After trying practically every make, the Akron Board of Education decided that the **Spencer Turbine** is the most satisfactory. We have completed their entire equipment with the

Spencer Vacuum Turbine Cleaner

The **Spencer** wins every time the various systems are put to the test of actual experience. Ask us to tell you the many reasons why this must be so, and why hundreds of our school installations are repeat orders from School Boards that have learned through satisfactory service what the **Spencer** advantages are. Write:

The
Spencer Turbine
Cleaner Co.

620 Capitol Avenue,
HARTFORD, CONN.



High School Training For Rural Children— *Through Consolidation*

There was a time when parents, living in the country, found it necessary to send their children to the city for a thorough education. Some do yet. But not in the progressive districts where consolidation has been effected.

Consolidation of rural schools is no longer in the experimental stage. It is a proven success. There are now over 7500 consolidated schools in the United States, with interest in consolidation nation-wide.

Besides increasing enrollment and attendance and giving the rural student the advantages of the graded school—a country school equal in all respects to the best city school—consolidation has a broadening influence on the people. It is the community center.

The development of a practical way to transport school children has materially helped in the successful consolidation of rural schools.

Parents are vitally interested in the safety of their children. They hold the school board responsible for their safety en route to and from school. Makeshift equipment and old, discarded vehicles come a long way from meeting either the requirements of children or parents.

The Studebaker School Bus is safe, sanitary and well-ventilated—the standard of passenger vehicle construction—and built especially to carry children.

If you contemplate consolidation—or, if you are already numbered among the progressive consolidated districts—you will be interested in Studebaker Busses. Write for catalog No. 1114—or we'll have our representative meet with your board any time you say.

Studebaker

SOUTH BEND, IND., U. S. A.

| | | | |
|--------------------|-------------------|----------------------|---------------------|
| Denver, Colo. | Portland, Ore. | New York, N. Y. | Kansas City, Mo. |
| Minneapolis, Minn. | Chicago, Ill. | Salt Lake City, Utah | |
| Dallas, Texas | Philadelphia, Pa. | Boston, Mass. | San Francisco, Cal. |

NEW APPLETON BOOKS

J. J. Klein's

BOOKKEEPING AND ACCOUNTING

A Complete Course

A new, straight-to-the-point system which wastes no time on unnecessary routine or out of date business methods. The budget is used as the progress of the work requires and not simply for "busy work."

An Introductory Course

An abridged text which can be covered in one year and which furnishes the student with a practical working knowledge of bookkeeping. Abundant exercises for practice are included.

Holmes and Gallagher's

COMPOSITION AND RHETORIC

The newest and best high school text in English. Runs along lines parallel to those indicated in the Bureau of Education's Bulletin entitled "Reorganization of English in Secondary Schools."

Gorton's

HIGH SCHOOL COURSES IN PHYSICS

Revised Edition (1918)

A new edition of this popular text is just ready. It contains many attractive features.

For prospectus and introductory terms write to

D. APPLETON AND COMPANY

35 West 32d Street

New York



Test the Rest
Then Buy the Best

The Fox Readers

In six volumes with Teacher's Manual

Now Ready

Phonetic Primer From Mother Goose

First Reader--Second Reader

(Profusely illustrated.)

Each volume 50 cents net.

By

FLORENCE C. FOX, Ed. B., Ph. B.

Specialist in Educational Systems, U. S. Bureau of Education,
Washington, D. C.

G. P. Putnam's Sons

Educational Department

2-6 West 45th Street

NEW YORK CITY

A TIMELY BOOK JUST PUBLISHED SCHOOL AND HOME GARDENING

By Kary C. Davis, Ph. D. (Cornell).

The whole work of vegetable and flower gardens outlined with full directions for planting and cultivating. Suitable for teachers, pupil gardeners, and the amateur home garden worker.

243 pages. 108 illustrations.

\$1.28 net.

FOR BETTER CITIZENSHIP

THE CADET MANUAL The Official Handbook of the High School Volunteers

By Major E. Z. Steever and Major J. L. Frink, U. S. A.

What is the Wyoming plan? It is Major Steever's wonderful development of the youth of the High Schools of Wyoming. The movement has spread until it is the subject of a bulletin of the United States War College. This book explains the movement, gives full directions for organization, drill, competition. It is beyond question the book of the hour.

You must see it.

Price, \$1.50 net.

TWO EXCELLENT TEXTS WITH SPECIAL FEATURES

PRODUCTIVE PLANT HUSBANDRY

By Kary C. Davis.

This is the first volume in an important new series,

LIPPINCOTT'S FARM LIFE TEXTS FOR HIGH SCHOOLS.

312 illustrations.

\$1.75 net.

SOILS PHYSICS AND MANAGEMENT

By J. G. Mosier, B. S., and A. F. Gustafson, M. S.

This is the first volume in

LIPPINCOTT'S COLLEGE TEXTS.

202 illustrations in the text.

\$2.00 net.

J. B. LIPPINCOTT COMPANY, PUBLISHERS

Chicago
2126 Prairie Avenue

Philadelphia
E. Washington Square

The best methods
of the best teachers
in the best schools



POTTER, JESCHKE, AND GILLET'S Oral and Written English, Books One and Two

If you want your work in elementary English to be a delight to teacher and to pupils, use these books: the most highly motivated and hence the most interesting texts in elementary English now available; the only texts that feature the socialized recitation.

Significant Adoptions

| | |
|--|------------------|
| Detroit, Mich. | Princeton, N. J. |
| Salt Lake City | Elgin, Ill. |
| Ogden, Utah | Titusville, Pa. |
| Savannah, Ga. | Waterloo, Iowa |
| Springfield, Ill. | Belleville, Ill. |
| Schenectady, N. Y. | Fargo, No. Dak. |
| Fitchburg, Mass. | Ashland, Wis. |
| Fremont, Ohio | Alpena, Mich. |
| Morristown, N. J. | Moberly, Mo. |
| New York City (On the Supply List) | |
| The State of North Carolina (Book One) | |
| 21 counties in South Dakota | |

GINN AND COMPANY

2301 Prairie Avenue

Chicago, Illinois



Cedar Rapids High School, Cedar Rapids, Iowa



Architects
JOSSELYN & TAYLOR

Installed by
THE JEFFREY CO.



This and Five Similar Schools in Cedar Rapids are completely equipped with "BRASCOLITE"

Write for our new illustrated catalog.

LUMINOUS UNIT CO., St. Louis, U. S. A.

NEW YORK, 30 Church St.
BOSTON, 217 Old South Bldg.

CHICAGO, 19 South Wells St.
SAN FRANCISCO, 132 Lick Bldg.

CINCINNATI, 515 Johnston Bldg.

ATLANTA, 1313 Healey Bldg.

CANADIAN DISTRIBUTORS—Northern Electric Co., Ltd.

PHILADELPHIA, 1007 Land Title Bldg.
MINNEAPOLIS, 204 Andrus Bldg.

(Concluded from Page 72)

The general plan of this civil government is what might be expected in a book of this character. Some topics, however, are quite individual. Good paragraphs upon the development of our own government appear in the introduction. A short chapter on the history of Idaho is highly informing. Owing to its wealth in mines, inspection of mines, water rights and irrigation duties of state engineer, receive special attention. The citizens of Idaho are urged to take a constant interest in their state historical society. This civil government can hardly fail in its aim of making young citizens of Idaho familiar with our political institutions.

Public Schools.

By G. W. Lockhart. Cloth, 211 pages. Price, \$7.50. H. W. Kingston Company, St. Paul, Minn.

An architect who has had ten years' experience in planning and erecting schoolhouses in the northcentral states has prepared this book as a guide for school boards and superintendents of schools. The book opens with four brief chapters on the remodeling of old schoolhouses for the improvement of light, ventilation, sanitation and safety against fire. The treatment is made practical by allusions to work of this kind which the author has successfully undertaken. Chapters six to thirteen discuss the essentials of architecture and methods of construction; chapters fourteen to twenty outline the requirements of special departments. Subsequent chapters take up heating and ventilation, sanitation, decoration, playgrounds and architectural practice. Finally, is added chapter thirty-one, illustrating a series of designs by the author and by other schoolhouse architects.

The author has had broad experience in dealing with rural and village school boards and superintendents and he understands their viewpoint thoroughly. Similarly, he understands school conditions and needs, and he writes sanely and wisely on arrangement, construction and equipment. While he emphasizes economy he warns indirectly against parsimony by setting a high standard for permanence and fireproofing. The only shortcoming which the book exhibits is due to the fact that the author has given scant con-

sideration to large city conditions and has failed to discuss the types of buildings that have been developed in the eastern and extreme western states.

The illustrations are very complete and interesting; the collection of plans would perhaps be more valuable if it were better balanced and included the work of a larger number of representative architects. It is a pity that an experienced editor has not been given an opportunity to correct obvious blunders in the mechanical makeup and arrangement of the book.

A Compendium of Parliamentary Law.

By Emma Guy Cromwell. Cloth, 188 pages. Laird & Lee, Inc., Chicago.

This book presents a complete outline of parliamentary law, touching on all commonly used principles in fifteen chapters. Of most importance is a Tree Chart which makes clear at a glance the practical working power of system, and the priceless value of justice to all as made possible thru parliamentary law. This is inserted in front of the book and can be easily referred to.

A glance at the Review Questions on pages 175 to 180, shows how well the subject is covered and how adaptable the book is for high school, college and university organizations and in fact all organized bodies.

Soil Physics and Management.

By J. C. Mosier and A. F. Gustafson. Cloth, 442 pages; illustrated. J. B. Lippincott Company, Philadelphia, Pa.

As the first volume of the Lippincott College Texts in Agriculture this book gives promise of a most valuable series. It is far more than a textbook for classroom use—it is a reference work for the practical farmer who would have at hand means for studying and solving soil problems. The authors take up the origin and placing of soil, the classification, mineral content, vegetable content and physical properties of soil, water content and control of moisture, alkali, temperature and aeration, organisms, tillage and rotation and erosion.

While the book sticks closely to the subject the authors have drawn liberally from the closely

related phases of agronomy and have made numerous references to the practical application of the principles and facts which they adduce. Thruout the book is fully illustrated with tables and diagrams from the latest official sources. Each chapter is followed by a list of questions based on the text and a list of helpful references for additional study.

Hamilton's Standard Arithmetics.

By Samuel Hamilton, Ph. D. Book One. Cloth, 256 pages. Price, 44 cents. The American Book Co., Chicago, Cincinnati, New York.

The success of this series of arithmetics during the past ten years has more than justified its title—Standard—as teachers in every state of the union can testify. Its chief merits have been due to the author's thoro understanding of teaching conditions in elementary schools and to his unceasing labor to relate the entire subject matter to child experiences as well as abilities and to those social, industrial and economic interests which must be woven into the common subjects of all schools.

In the present re-issue of the first book radical revisions have been undertaken to bring the work into tune with the latest research in the pedagogy of arithmetic and to incorporate all those changes which the experience of both author and hundreds of teachers have thought desirable. The basic principle of the book, the general arrangement of topics and the bulk of the problems have been retained. Additional emphasis has been laid on number games and motivated drill and the development of self activity and mathematical thought. The book splendidly covers the work needed for the second, third and fourth years.

AMONG BOOKMEN.

Mr. R. B. Routt, who has recently joined the agency staff of J. B. Lippincott and Company, is located at Pendleton, Indiana. An item in the May Journal erroneously gives his address at Pendleton, Ore.

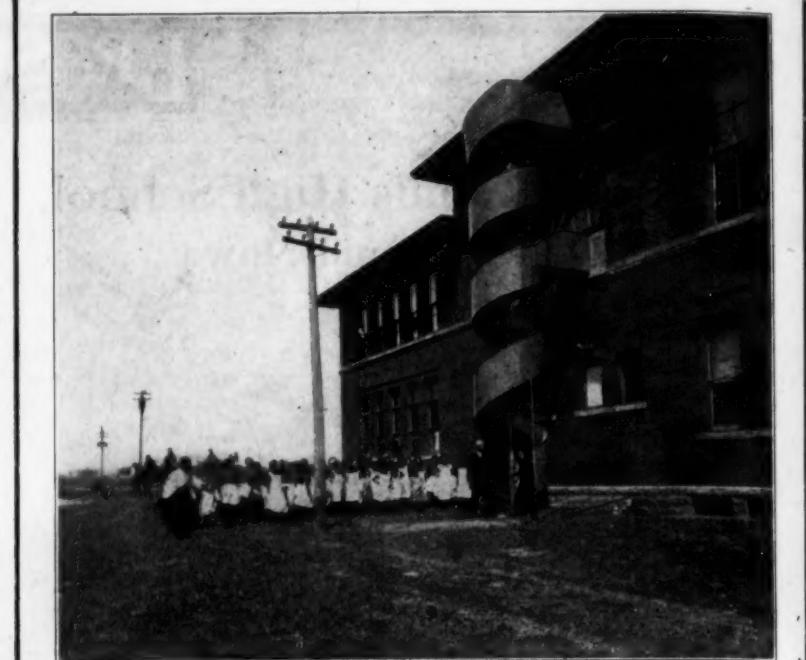
Supt. Otis G. Wilson, Fairmont, W. Va., has been re-elected for the fourth time by the board of education. The salary has been increased to \$3,250.

PREMIER ENGRAVING COMPANY



WE Specialize in making Halftones, Zinc etchings, Electrotypes for Annual Reports, School Magazines, College and High School Annuals. We are in a position to give expert advice and assistance in purchasing engravings effectively and economically. Write us for quotations.

1105 VLIET STREET PHONE GRAND 1231
M I L W A U K E E



SLIDE TO SAFETY

On a Standard Gravity Spiral Fire Escape.

No opportunity to become injured; capacity approximately eighty children a minute.

A sense of absolute security prevails in a community where school children are protected by our scientific spiral fire escape. Parents have the satisfaction of watching fire drills and seeing for themselves the facility with which the children are brought to the ground. They realize that, notwithstanding the panic conditions at a real fire, their boys and girls will be in no danger, for the law of gravity will carry them quickly from the school.

Write for catalog.

Minnesota Manufacturers' Association

169 Pennsylvania Ave., North St. Paul, Minn.

Branch Office: Room 212, 549 W. Washington St., Chicago, Ill.

Agencies in all principal cities.

PLANNING THE WAR TIME SCHOOL.

(Concluded from Page 36)

fashion; by stopping these at the ceiling-line, at least a thousand dollars might be saved.

In the more southerly states, the cost could be still further cut, by building this school as fig. 16, with an open assembly-court, surrounded by narrow porches; the domestic science room serving as a stage. A very slight enlargement of the cloakrooms would give space for storing folding seats. The students could be drilled to march in and out, each one carrying his own chair. We reserve-officers did this at Fort Myer Training Camp, when formed up, 2,500 strong, for the evening lecture!

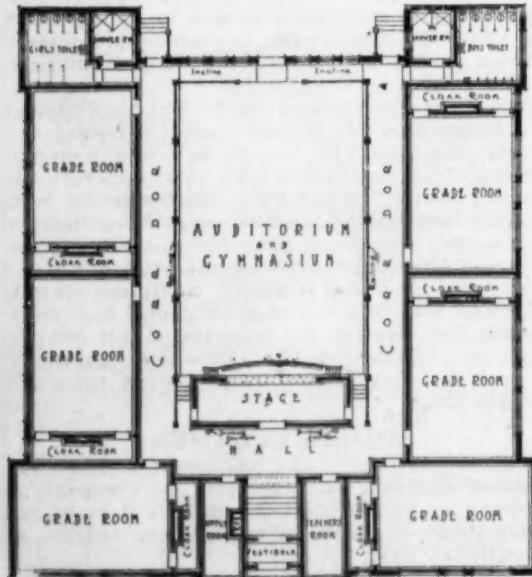


Fig. 15.
Floor Plan, New Grade School Building,
New Richmond, Wis.

"FISHING TRIPS."

(Concluded from Page 32)

a teacher who can think of Red MacKale as a real, two-fisted, he-boy who loves, feels, suffers, and thinks, and we want that teacher to think



Fig. 14.

New Grade School Building, New Richmond, Wis.
Volkman and Hancock, Architects, Eau Claire, Wis.

of the other 799 children in that school as real flesh-and-blood boys and girls, the flowers of humanity. God knows, they wilt in spite of our tenderest care. We want a Gardener and not an advertising agent."

I bowed them out of my office, but a blind man could have seen that the fight was on. Squortlet's friend was elected!

In Squortlet's friend eight hundred girls and boys received a stone and a serpent, and there was no use in my railing about it. Dear Slumbering Public swallowed the reptile without even a grimace; but she'll cough him up later on, and she may cough up several more, once she gets started. She can't digest them, that's certain.

Surely, "turtels is useful creechurs." But I'll get that pickerel anyway; also the mink.

What It Was.

The District Trustee was addressing a school in Ohio.

"Children" said he, "I want to talk to you for a few moments about one of the most wonderful, one of the most important organs in the whole world. What is it that throbs away, beats away, never stopping, never ceasing, whether you wake or sleep, night or day, week in and week out, month in and month out, year in and year out, without any volition on your part, hidden away in the depths, as it were, unseen by you, throbbing, throbbing, throbbing, rhythmically all your life long?"

During the pause for oratorical effect a small voice was heard:

"I know—it's the gas meter."

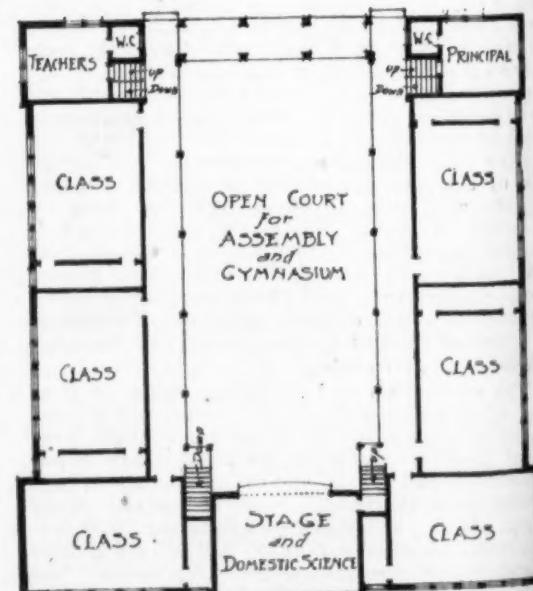
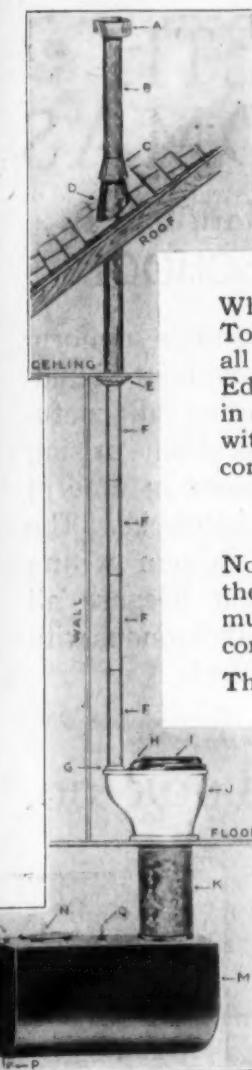


Fig. 16



Do You Want to Discard Your Present Outdoor Toilets?

If so, Read on—

Health Officials and Educational Departments are recommending, and in some cases demanding, that the unsightly, unsanitary, demoralizing outhouse be eliminated.

Where water pressure and sewers are not available a Lansing Chemical Toilet System should be installed. The Lansing is guaranteed to meet all the requirements of the various State Boards of Health and State Educational Departments: so easy to install, so simple and economical in operation that school officials all over the country are doing away with the old fashioned outhouse and installing the odorless, sanitary, convenient

LANSING CHEMICAL TOILET

No plumbing is required; no running water. The illustrations show the method of installing a Lansing System. Is supplied in single or multiple units; cost about the same as erecting an outhouse and is as convenient, and as modern as any water flush system.

The Lansing Chemical Toilet is manufactured by an organization specializing in this line for years; and any toilet bearing this name is your assurance of reliability in service and quality.

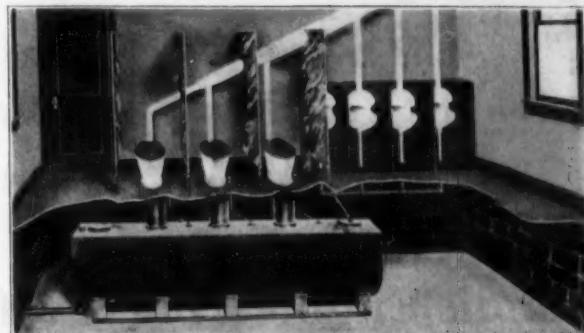
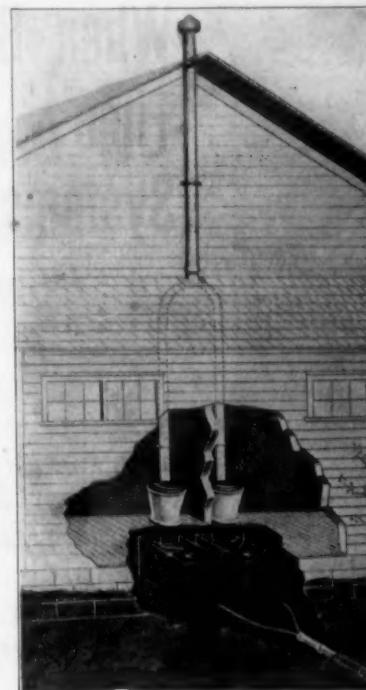
You can solve your school toilet problem in a satisfactory manner, by placing the toilet right in the school buildings under the direct supervision of the teachers, even tho sewers and water pressure are not available. We have done so for thousands of schools and are therefore in a position to equip your school with the exact size unit needed.

For complete and detailed information write to your nearest school supply jobber, or direct to

DAIL STEEL PRODUCTS COMPANY

4504 Main Street

Lansing, Michigan



WHEN TEACHERS SIT IN JUDGMENT.

(Concluded from Page 20)

man who can inspire "by the contagion of his own spirit," whose teachers know that he is developing them to do nobler and better work than they have ever done before, will have little occasion to worry about disloyalty or shirking.

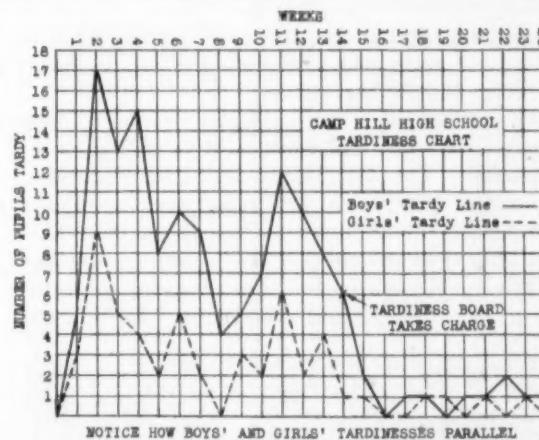
The man who is lacking in this power must work toward it if he wishes to succeed! Pretence, however skilful, will not deceive his teachers any more than they can deceive their pupils. You can't put over what isn't there.

THE ELIMINATION OF TARDINESS.

(Concluded from Page 23)

The secretary keeps a daily record of tardy pupils and reports the disposition of claims to the principal of the high school immediately after each board meeting.

If the board exempts a pupil from tardiness, that pupil is not counted late. If the board does not exempt a pupil, or if a pupil is tardy and does not claim exemption, two per cent is deducted from each and every subject carried by the pupil, in reckoning whether the pupil must take the final examinations at the end of the semester. In the Camp Hill high school, pupils who have an average of 85 per cent or better in a subject are excused from the final examinations. Now, by this ruling, we determine whether a pupil must take the examinations by deducting two per cent for each tardiness not exempted. Thus, if a pupil has a mark of 87 in Virgil and has two unexcused tardy marks, we deduct four per cent making the pupil's mark 84. That pupil must take the examination. However, in determining the pupil's report mark in Virgil, we consider the mark as 87. In short, we make a mental deduction merely to see whether that pupil takes the examination. And this is done in every subject.



The greatest possible spirit of co-operation has been shown by both the "tardy board" and the pupils of the high school. The board has met punctually every Friday afternoon, has been very business like, and has been most careful in its examination of exemption claims. As a matter of fact, the chairman of the board got up from a sick bed and came to school one Friday afternoon so as to be present at the board meeting.

What about results? Our answer is clear: Tardiness has gone forever from the Camp Hill high school. Where we once had thirty tardy marks we now have three. Tardiness instead of the usual is now the unusual thing. Our "tardy board" has but little to do.

The board has on the average exempted one of every four claims coming before it. The pupils realize that the board means business, and there is an excellent spirit of co-operation throughout the school.

We commend this plan as one well worth trying by any high school where tardiness is a serious problem.

NEW CONDITIONS OF THE CITY SCHOOL SUPERINTENDENCY.

(Concluded from Page 24)

Whether board members or city school superintendents, they, however, make a great mistake who imagine that the course of study and methods of pedagogy, school organization and programs, school architecture and sanitation are to be transformed either much for the better or much for the worse. The changes will be relative, not absolute; betterments, not revolution. What the future does contain is, it seems, that educators are being emancipated from petty surveillance and correction in details and in consequence are being held for judgment as to their total fitness for the guidance and equipment of youth to carry on the work of free democratic civilization.

SCHOOL REORGANIZATION OF ROSWELL, N. M.

(Continued from Page 34)

and three rooms for office, library, and rest rooms. When completed each of these buildings will contain twenty-two classrooms. It is believed that this will be sufficient to accommodate all pupils who will ever live in the territory contributory to these buildings.

Another feature that was kept constantly in mind was the matter of economy. Nothing however that is essential to a good school was omitted. Economy was secured by the elimination of waste space. In many primary buildings practically no use is made of a large part of the basement. In these buildings only the "footings" were placed below the surface, and in the two brick buildings these rooms on the ground floor are used for classrooms the same as those on the first and second floors. There is absolutely no waste space in any part of the



60-Beat, Self-Winding
Master Regulator.
Style A60T

When Buying Electric Time and Program Clock Systems, Consider—

- 1st. **Reliability**
- 2nd. **Maintenance**
- 3rd. **First Cost**

Do not be deceived by buying the **Cheapest**. The difference in **First Cost** between a good system and a cheap system is often spent in a short time for increased **Maintenance**.

With increased **Maintenance** we always find **Reliability** impaired.

Write for Catalog, Full of Data, that tells Why

We will gladly assist Architects, Engineers and School Authorities to prepare complete specifications, conduit layouts, etc.

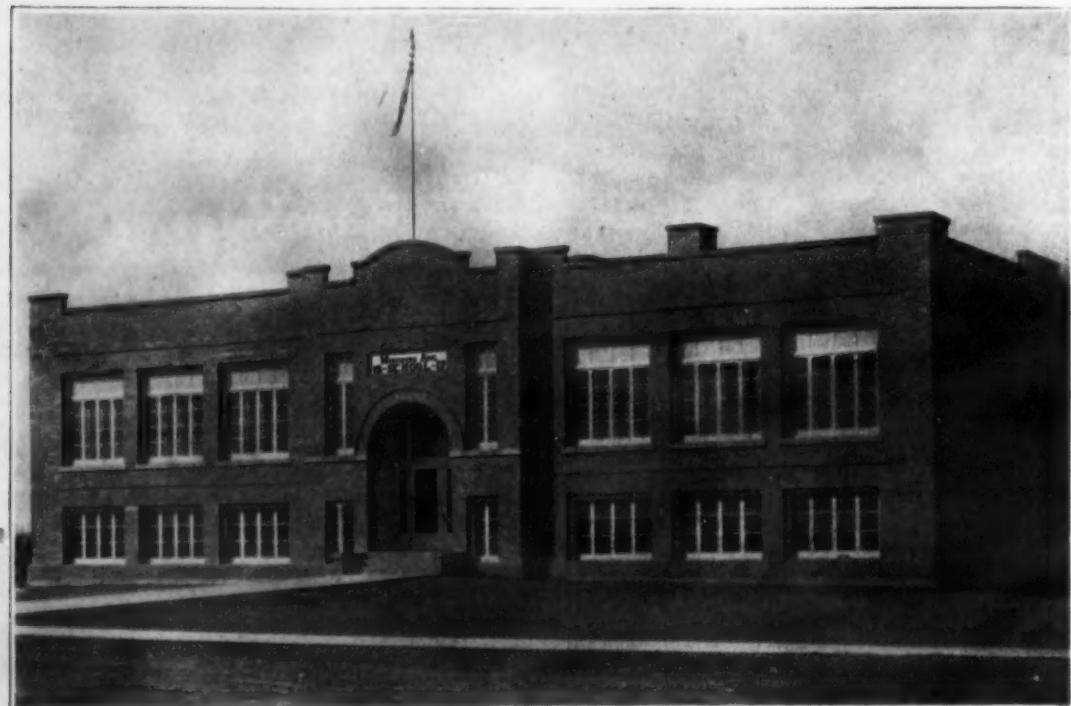
Landis Engineering & Mfg. Co.
Waynesboro, Pa., U. S. A.

buildings. The two-unit brick building was constructed at a cost of sixteen cents per cubic foot, the one-unit brick building at eighteen cents, and the frame-stucco building at nine cents. This includes heating and plumbing.

In the matter of safety and sanitation the pupils in these schools are well cared for. All corridor floors and stairways in the brick buildings are reinforced concrete, thus making these buildings practically fireproof. All buildings are equipped with the best of sanitary drinking

fountains, and every classroom is provided with the most up-to-date school window blinds with a gravity ventilating system.

But these three new buildings are not all that have been provided for the boys and girls of Roswell. The old Central building containing fourteen classrooms has been remodeled and modernized to the extent of nearly \$12,000. This building was erected nearly a score of years ago when but little attention was given to questions of proper lighting and ventilating. In fact, the



MISSOURI AVE. SCHOOL, ROSWELL, N. M.
C. R. Carr, Architect, Roswell, N. M.



SETH THOMAS

Secondary Clocks
FOR SCHOOLS

THEY maintain uniform time throughout a building, eliminating all confusion and loss of time arising from difference in time of self contained clocks. The Secondary System is the most efficient because all clocks are synchronous with the master clock.

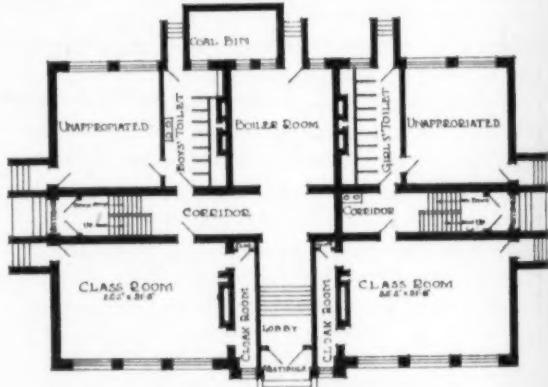
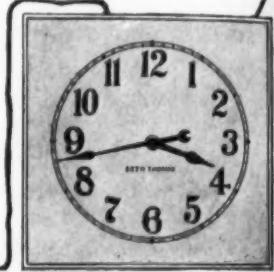
Catalog, specifications and suggestions on request

SETH THOMAS CLOCK CO.

Established 1813

Factories:
Thomaston, Conn.

—
NEW YORK
CHICAGO
SAN FRANCISCO



First Floor Plan, Washington Ave. School.

matter of systematic ventilation had been wholly neglected. In recent years this building had received a number of patchy improvements in the matter of tinting and of window shades until its walls presented a motley conglomeration of misfits. The basement was only about six feet in depth and was used only to house the furnace and the fuel. It was a catch-all for rubbish, a regular fire trap. The improvements consisted in lowering the basement level about two feet, in constructing a floor of cinder concrete, in erecting a smoke flue and two large flues for ventilating the toilets, in installing a metal ventilating shaft in the side of each room, in finishing a room on the third floor for a library, in constructing "aroways" along the side of the basement rooms so as to permit the installation of full-sized windows, and in introducing a new up-to-date heating plant. The new rooms in the basement have been equipped for work in manual training, and the entire school has been organized on the order of a junior high school.

(Concluded on Page 80)

**SEND TO US FOR A COPY OF
OUR PAMPHLET ENTITLED**

COAL

IT CONTAINS INTERESTING AND
VALUABLE INFORMATION
ABOUT THE PROBABLE
SUPPLY OF THE
DIFFERENT
KINDS.

JOHNSON SERVICE COMPANY

Milwaukee, Wis.

THOMAS CHARLES COMPANY

2249-53 Calumet Avenue
CHICAGO

Established
1878

40 Years in Chicago

Incorporated
1890



May 15th, 1918 we moved to our new home
at the above address.

Our new home is a fitting tribute to the quality of our products, and
the service which we have rendered to the educational field, in this
section since the opening of our office in Chicago forty years ago.

Here you will be welcome at any and all times, and we sincerely
invite you to call.

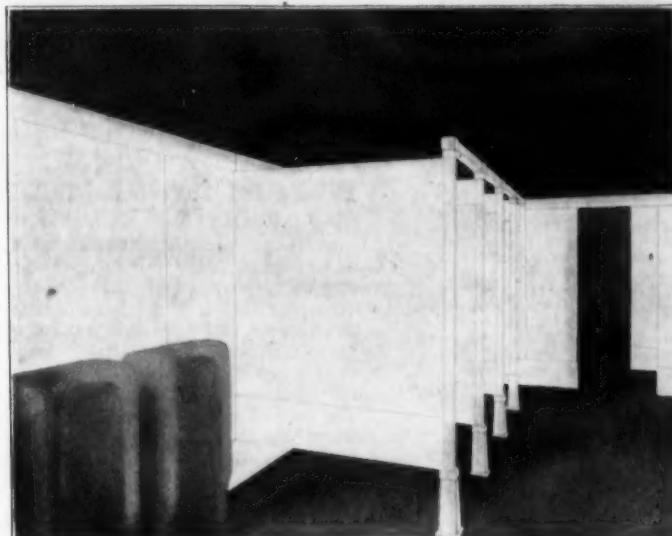
One section of our office is furnished as a rest room and meeting
place for visiting teachers and other friends. Samples of our materials
and books always on display.

Our improved facilities assure maximum service with prompt and
careful attention to all your needs.

Whether Remodeling or Building New Protect the Children's
Health by Installing New



Sanitary Toilet Partitions



New Vitrolite Toilets, Jefferson Grade School, Red Wing, Minnesota

Whether remodeling or building new you should know about the new "VITROLITE Sanitary Toilet Partition" now being used in the finest schools in the country. It is a partition especially adapted for schools. Snow-white, good looking and non-absorbent, it is the best kind of health insurance. Germs cannot permeate nor organic acids alter its beautiful smooth surface. VITROLITE is fire-resisting, harder than marble and will wear for ages.

The partition is so constructed that it is proof against damage from shocks and floor settlement.

VITROLITE is widely recognized and used because of its sanitary qualities in hospitals. It cleans as easily as china and is ideal for lunchroom table tops and domestic science laboratories.

Every School Trustee, Secretary and Superintendent owes it to himself to at least know about VITROLITE.

May we send a sample with details?

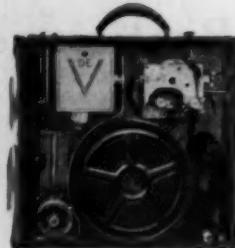
THE VITROLITE COMPANY

Chamber of Commerce Building
CHICAGO

EVERY SCHOOL NEEDS
THE DE VRY

Portable Motion Picture Projector

PERFECTED PROJECTION



Motor Drive and Rewind

17" x 17" x 7"

Weighs but Twenty Pounds.
Attaches to any Light Socket.
Takes Standard Size Reels and Film.
Any Size Picture up to 12 ft.
Any throw up to 80 ft.
No setting up—no adjustments.
Ready instantly.
Equally desirable for class-room
and auditorium.
Universally applicable.
No special wiring required.
Simplest to operate.
Built to last.

Adopted by the United States
Government in all Departments where
Motion Pictures are used, and also by
the American Red Cross.

Used in all Y. M. C. A. work on
transports, at home and abroad.

Ford Motor Car Company have 70
De Vry's, Packard Motor Car Com-
pany have 25 and Dodge Brothers
Motor Car Company have 75.

THE DE VRY CORPORATION

115 N. Wells St.

CHICAGO, U. S. A.

(Concluded from Page 78)

Thus inside a period of twelve months from the time the board first took action Roswell has witnessed the erection of three new schoolhouses and a thoro remodeling of an old one. A total of 37 rooms have been placed now in use or are awaiting future needs—all this in a town where it had often been said that it could not be done.

But the end is not yet. The board has taken under consideration the erection of a high school auditorium which was omitted from the original plan of the building and the addition of a wing for high school classrooms, the addition of four rooms to an old primary building, and the remaking of another primary school out of two old frame annexes. When this program is completed every school building in the city will be either a new building, modern in every respect, or else an old building thoroly remodeled and modernized.

As an outgrowth of this reorganization factionalism in all school matters has disappeared. Every one seems satisfied that they have been given a square deal, that the board of education has handled the entire matter in a purely scientific manner without fear or favor, and that their city has entered upon a new era of educational progress.

THE VALUE OF PERMANENT SCHOOL
CENSUS.

(Concluded from Page 39)

no answer ready except the assertion of contrary opinion. When such complaints are made, and they will be made again, we should know from whom they come and how representative those complaints are.

"We should know whether the labor opportunities exist in sufficient numbers to justify training, or whether disappointment is bound to

overtake any significant proportion of our children in spite of preparation. The study of specific defects of particular courses and particular methods would very properly start from the data derived thru the automatic follow-up of all the children in the community during minority."

Summary of Arguments for Permanent School Census.

Mr. Davis summarized his arguments as follows:

"1. A permanent school census is the only adequate basis for the enforcement of the compulsory education law. It identifies each child, keeps track of him, and locates him at all times.

"2. It provides an accurate forecast of the number of children for whom instruction must be furnished each year, each term.

"3. It minimizes late entrance to school and consequent retardation.

"4. It takes note of the shifting of population as well as of its increase and this indicates in advance the need of new school accommodations.

"5. If any given area is affected by immigration, increase or decrease, it registers the fact and the amount.

"6. It provides a follow-up of employed children, and thus enables school authorities to list and compare the occupations of pupils with the character of instruction given them.

"7. By the organization of its information concerning occupations and developments, it provides the facts necessary to the development of industrial and vocational courses.

"8. Enforcement of compulsory attendance at continuation schools and evening schools is peculiarly dependent upon the permanent census.

"9. Its child population statistics are necessary for the development of recreational facilities.

"10. It affords a true and accurate basis for conscription of minors and registration of new voters."

MOTIOGRAPH DE LUXE



When you want the **BEST** Projector for Schools, Theatres, or any other place, investigate the MOTIOGRAPH DE LUXE.

Price complete, \$450.00
1917, No. 1002-D Model, \$265, hand-driven
Mazda equipment complete, \$235.00

Write for literature.

ENTERPRISE OPTICAL MFG. CO.

564-572 W. Randolph St.

CHICAGO, ILL.

WESTERN OFFICE: 833 Market St., San Francisco, Cal.

CO-OPERATION DESIRED.

The SCHOOL BOARD JOURNAL is covering a broad field in American school administration. The co-operation of readers will be appreciated in doing this work more thoroly, more accurately and more comprehensively. The best co-operation which readers can render is by contributing ideas, news items and articles to the editorial pages.

This co-operation will be of mutual benefit.

It will make the readers who write, organize their ideas more clearly and definitely, and will, perhaps, call their attention to defects and shortcomings which they did not suspect. It will pass on good news about school improvements and educational achievements that will encourage and materially assist other school authorities in the solution of their problems. The greater and wider the knowledge of achievements and advances in education, the better is the opportunity of each community to improve itself.

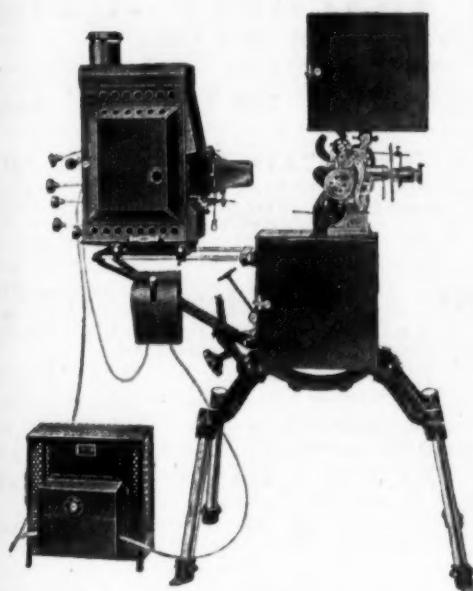
This co-operation will help us in adding to the number of our valued contributors and it will aid generally, men and women who are studying school problems from the viewpoint of the school-board member and superintendent.

The Editor will always be glad to consider manuscripts, criticisms and suggestions. If you have not written for publication before, you will find the relations with the SCHOOL BOARD JOURNAL to be both pleasant and profitable.

Professor: "Pat, tell me, now, what is your solution to the world problem?"

Pat: "Well, sir, I think we should have a world democracy—with an Irishman for king—Life."

The Universal Teacher The Motion Picture



Imparts all information by presenting to the eye the events of the world **IN ACTUAL REVIEW.**

Its message can only be properly delivered through **PERFECT PROJECTION.**

The Universal Projector Power's Cameragraph No. 6B

has been co-existent with the industry, and has brought projection to its present state of high efficiency.

Power's Projects Perfectly

NICHOLAS POWER COMPANY

INCORPORATED

90 Gold Street

Pioneers of Projection

NEW YORK, N. Y.

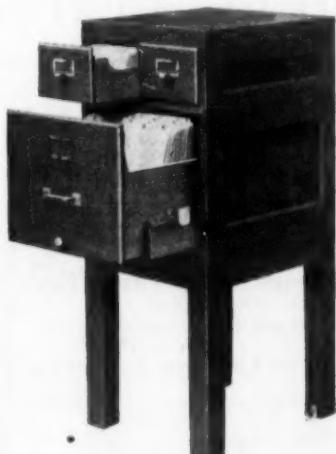
The NATIONAL SCHOOL SYSTEM

The System for Attendance and Scholarship Records adopted by the Division of Superintendents of the N. E. A. with improvements down to date. Provides for an accumulative pupil's record from kindergarten to graduation. Records are always up-to-date. Readily accessible at all times. Cuts work of keeping records to a minimum. Costs less to maintain than any other known method. A real efficiency system for the progressive school.

FILE FOR PRINCIPAL'S OFFICE

This shows a stack of Shaw-Walker Sectionets as used in Principal's or Superintendent's office. In these drawers are filed office record cards and attendance and scholarship record sheets. These files being sectional can be added to at any time, like a sectional bookcase.

For complete information ask us to send our handsome illustrated booklet.



MANUFACTURED BY

SHAW-WALKER

Wood & Steel Filing Cabinets & Supplies

MUSKEGON

MICHIGAN

Ink That Satisfies

The Diamond College Writing Fluid is a Blue Black Ink, always flows freely and is good to the last drop. Never gums up nor gets thick in the well. No other ink equals it for school use.



PRICES AS FOLLOWS:

| | |
|--|--------|
| Barrels of about 50 gallons, per gallon | \$1.23 |
| Half barrels of about 25 gallons, per gallon | 1.32 |
| 10 gallon kegs, per gallon | 1.35 |
| 5 gallon kegs, per gallon | 1.40 |
| 1 gallon jugs, per gallon | 1.75 |

If an ink that writes black at first is required, we offer the well known Diamond Imperial Black Ink. The price is 30c per gallon less than the above quotations.

DIAMOND INK CO., Milwaukee, Wis.

Directory of Teachers' Agencies



The Gateway to Opportunity—Fisk
28 E. Jackson Blvd., Chicago, Ill.

MANUAL TRAINING
AGRICULTURE
HOME ECONOMICS
TEACHERS OF
COMMERCIAL BRANCHES
PHYSICAL TRAINING
ATHLETICS

Teachers' Agency
CHICAGO
New York, Boston, Denver
Portland, Birmingham, Los Angeles
Teachers' Agency
ROBERT A. GRANT, Manager.
316-17-18 NICHOLAS BLDG. ST. LOUIS, MO.

SUPERIOR TEACHERS
and Superintendents
look upon this agency as the
natural avenue to the best
positions. Many of the keenest
and most successful teach-
ers in the country are regis-
tered with us.

Reliable information about available
candidates furnished on request.

Also recommend Athletic Coaches who can teach academic sub-
jects. The University of Wisconsin took eight of our men. More
than a third of the State Universities selected our candidates.

THE SPECIALISTS' EDUCATIONAL BUREAU
ROBERT A. GRANT, Manager.
316-17-18 NICHOLAS BLDG. ST. LOUIS, MO.

AN AGENCY THAT RECOMMENDS. Last year we announced that thereafter we should
have nothing to do with notices of vacancy; that we should inform our candidates of places
only when officially asked to recommend by the school board, and then only usually a single candi-
date, never more than two or three. The result was the largest business in our 31 years of
experience. Suppose you try us. The School Bulletin Agency, Syracuse, N. Y.

NORTHERN TEACHERS' AGENCY, 12 Roberts Street,
FARGO, N. D.
The demand for good teachers at good wages in all schools is constant in this northwest. You
will like to teach here. Now is the time to enroll. Write us
today for blanks and literature.
W. L. STOCKWELL, President. MRS. MATTIE M. DAVIS, Manager.
State Supt. 1903-11 14 years Co. Supt. Cass Co.

**OUR SIXTH YEAR OF RECOMMENDING ONLY WHEN ASKED TO DO SO BY
SUPERINTENDENTS OR SCHOOL OFFICIALS.** 100% more of our members
placed with discriminating employers this year than in any previous one. Two private
exchanges, special long distance line and our own operator in charge equips us especially to fill
emergency vacancies. Tested and investigated teachers for any position our specialty. A
DISTINCTIVE SERVICE for educators who appreciate professional methods.

DEPARTMENT OF EDUCATION

The Western Reference & Bond Ass'n, Inc., 699 Scarritt Bldg., Kansas City, Mo.

MISSOURI VALLEY TEACHERS' AGENCY
You know what you want. We have it. Let us work together.
Services free to school officials. Enrollment free to teachers.
KANSAS CITY and KIRKSVILLE, MO. O. F. REVERCOMB, Manager
Send all telephone and telegraph messages to Kirksville.

EDUCATORS-AGENCY A. P. GODDARD, Pres.
Y. M. C. A. Bldg., 19 S. LaSalle St., Chicago
PERSONAL INSPECTION OF INSTRUCTORS IN THE CLASSROOM ONE OF
THE MANY DISTINGUISHING FEATURES OF OUR SERVICE.

Southern
Teachers' Agency
Columbia, S. C.
Chattanooga, Tenn.
W. H. JONES.
Mgr.

AN ANNOUNCEMENT.
To more thoroughly cover the middle South, and to take care of our rapidly growing
business in that splendid territory, we have opened an office in Chattanooga. It will
be under the same management as our Columbia office, and will specially cover
Tennessee, Kentucky, Alabama, Louisiana, Mississippi, Arkansas and Oklahoma.
Columbia, S. C. Two Offices - One Fee Chattanooga, Tenn.

SILICATE VENEER PLATE
BLACK BOARD

WHY don't you purchase
the best goods for your
school? Our revolving black-
boards and roll blackboards
have been in constant use in all
the Public Schools in New York,
and the principal cities for
thirty-six years, which is a suf-
ficient guarantee. Send for our
illustrated catalog and discount
sheet and compare prices with
other manufacturers.

N. Y. Silicate Book Slate Co.
20-22-24 Vesey St., NEW YORK

The Pratt Teachers' Agency

NO. 70 FIFTH AVENUE, NEW YORK

RECEIVES calls at all seasons for college and normal graduates, specialists, and
other teachers in colleges, public and private schools, in all parts of the country.
Advises parents about schools.

WM. O. PRATT, Manager

THE ALBERT TEACHERS' AGENCY

25 E. Jackson Boulevard, Chicago

NEW YORK DENVER SPOKANE
437 5th Ave. Symes Bldg. Peyton Bldg. "Teaching as a Business" with chapters
on War, Salaries, etc. sent free. Thirty-
third year. One fee registers in all.

ALBANY TEACHERS' AGENCY, Inc. 81 Chapel Street
ALBANY, N. Y.
PROVIDES SCHOOLS AND COLLEGES WITH COMPETENT TEACHERS.
ASSISTS TEACHERS IN SECURING POSITIONS
HARLAN P. FRENCH, Pres. and Treas. W. W. ANDREWS, Secretary

The best way to secure a thoroughly competent Superintendent or Teacher, is to write
Superintendent H. E. KRATZ, Manager of

SCHOOL AND COLLEGE BUREAU

21 E. Van Buren St., CHICAGO

His services cost Boards of Education nothing. He has a splendid list of Superintendents
and Teachers from which to select.

THE COLORADO TEACHERS' AGENCY

504-505 Kittridge, Bldg., Denver, Colorado

Twenty-four years' successful service in behalf of teachers and School Officials.
We operate in all Western States.
Member of National Association of Teachers' Agencies.

FRED DICK, MGR. Co-operating Agencies—Harrisburg, Pa., Atlanta, Ga.

FISK TEACHERS' AGENCY R. A. CLAYTON, Manager
Birmingham, Alabama
Other Offices: Boston, New York, Pittsburgh, Chicago, Denver, Portland, Berkeley, Los Angeles

SCHERMERHORN **TEACHERS' AGENCY** Est. 1855
366 Fifth Ave., between 34th and 35th Sts., New York
CHARLES W. MULFORD, Prop.
Chicago Office, 306 So. Wabash Ave.
NORMAN PLASS, Manager. A superior agency
for superior people. We register only
reliable candidates. Services free to
school officials.

PROMPT, EFFICIENT SERVICE
The Largest Agency in the West
WM. RUFFER, A. M., Mgr.

ROCKY MT. TEACHERS'
AGENCY, EMPIRE BLDG., DENVER, COLO.

The PARKER TEACHERS' AGENCY
MADISON, WISCONSIN
Licensed by and operating under bonds to the
State of Wisconsin. Personally conducted by
Willard N. Parker, formerly Assistant State
Superintendent. Specialist teachers our specialty.

TEACHERS ARE GOING TO WAR

Many teachers are joining some form of military or relief organizations. School officers will
find this agency better prepared than ever to take care of this unusual demand for teachers.

Remember we recommend only when asked to do so by school officers.
THE MISSOURI TEACHERS' AGENCY
ARTHUR B. CLINE, Manager KIRKSVILLE, MISSOURI

You receive
FULL
VALUE
when you buy
a FLAG of

STERLING - Double Wasp.
All Wool Bunting
Reg. U. S. Pat. Off.

A Flag of Sterling Quality

OR
DEFIANCE - Two Ply
Cotton Bunting
Reg. U. S. Pat. Off.

A flag that bids defiance to the weather

SOLD BY DEALERS EVERYWHERE

Made only by
ANNIN & CO., New York

WAR SAVINGS STAMPS DELIVERED TO YOUR HOME

Tear Out—Fill In—Hand Letter-Carrier—or Mail to Post Office
TO THE LOCAL POSTMASTER:—Kindly have letter-carrier deliver
to me on _____ for which I will pay on delivery:

(Date)
\$5. U. S. WAR-SAVINGS STAMPS at \$_____ each.
(State number wanted)
25c. U. S. THRIFT STAMPS at 25c. each.
(State number wanted)

Name _____

Address _____



| W. S. S. COST DURING 1918 | | | | | |
|---------------------------------------|--------|-------|--------|------|--------|
| April | \$4.15 | July | \$4.18 | Oct. | \$4.21 |
| May | 4.16 | Aug. | 4.19 | Nov. | 4.22 |
| June | 4.17 | Sept. | 4.20 | Dec. | 4.23 |
| W. S. S. WORTH \$5.00 JANUARY 1, 1923 | | | | | |

CLASSIFIED WANTS

REPRESENTATIVE

Wanted Principal—for High School, Globe, Arizona. Applicant must be a University graduate, and have good health and a record for having made good in High School work. Good salary and opportunities for right man. Address George R. Hill, Clerk, Globe, Arizona.

Wanted — By manufacturer of Chemical Toilets, an energetic, hustling, assistant salesmanager. Must be able to handle correspondence, do some field work and produce advertising. Exceptional opportunity if you can produce. Dail Steel Products Co., Lansing, Michigan.

Wanted—Man to take charge of growing department with large school supply house. Splendid opportunity for right man. Address Frank Bruce, care of Bruce Publishing Co., Milwaukee, Wis.

GAS MACHINE

For Sale—We have for sale a gas machine with air pump and automatic mixer, capable of taking care of 100 lights. The gas can be used for domestic science. About six gallons of gasoline will produce on an average, a thousand cubic feet of gas. Will sell outfit at reasonable price. Address Ralph W. Westcott, Supt. of Schools, Mansfield, Mass.

Copy for this page must reach us at Milwaukee not later than the 15th, preceding the date of issue. All advertisements are guaranteed. The rate is 30 cents per line, average of six words per line, minimum of five lines accepted.

SCHOOL SUPPLIES

Catalog—Inks, Paste, Mucilage, Etc. Send for our catalogs today. Samples gladly sent upon request. When writing advise, if possible, your requirements and we will quote. Address the Robert Keller Ink Co., 105 N. Clark Street, Chicago, Ill.

FIRE ESCAPE

For Sale—One Kirker-Bender Fire Escape in excellent condition; for two-story building. Out of use only because of erection of new building. An unusual opportunity to secure this standard fire escape at a low price. Address Secretary Board of Education, Dundee, Ill.

BOOKLET

National System—That you might know what our National System is, we shall be more than pleased to mail you upon request one of our booklets, which illustrates and describes this system in detail. This should be in the hands of every live Superintendent and School Board in the United States. Address the Shaw-Walker Co., Muskegon, Mich.

TYPEWRITERS

Booklet—If you are contemplating a commercial course in your school for next year, be sure to get in touch with us on the matter of typewriters. A booklet telling of the many advantages and features of the Underwood typewriter, will be gladly sent to school officials. Address the Underwood Typewriter Co., New York, N. Y.

SCHOOL SUPPLIES.

Booklet—We shall be pleased to send you one of our new booklets, telling of our complete line of school supplies, which have been famous among school officials for the past eighteen years and longer. Address School Dept., Weber-Costello Co., Chicago Heights, Ill.

Booklet—Circulars and prices of our Stand and Wall Bracket Holders will be gladly sent upon request to Superintendents and Secretaries of the School Board. Address the Union School Furniture Co., 1028 W. Van Buren St., Chicago, Ill.

Catalog—We shall be pleased to send you our latest catalog on school inks, paste, glue, etc. Prices and further information will be gladly sent upon

request. Address Diamond Ink Co., East Water St., Milwaukee, Wis.

ERASERS.

Sample—On page 70 in this issue of the American School Board Journal, you will notice our advertisement on erasers. If you are in the market for erasers for your school, be sure to write and we will gladly send you sample. Address the Associated Mfrs. Co., 60 Third St., Milwaukee, Wis.

Samples—If you are interested in blackboard erasers, write us and we shall be pleased to send you a sample of the famous Caxton Side Bound Eraser. Address School Dept., Caxton School Supply Co., 560-570 W. Monroe St., Chicago, Ill.

VITROLITE.

Samples—Every school trustee, Secretary and Superintendent, owes it to himself to know something about Vitrolite. Used to splendid advantage in toilet rooms, Domestic Science Departments and in connection with lunch room equipment. Sample with details sent upon request. Address the Vitrolite Co., Chamber of Commerce Bldg., Chicago, Ill.

Booklet—Pencil sharpeners of all kinds and all descriptions, especially adaptable to schoolroom use. Before making up requisitions, write us for our booklet and prices. Address the Automatic Pencil Sharpener Co., 58 E. Washington St., Chicago.

IT TOOK TWENTY-SIX YEARS

to gather and make possible the wealth of plans, photographs, exteriors, interiors, now incorporated and published in

BRUCE'S SCHOOL ARCHITECTURE LIBRARY

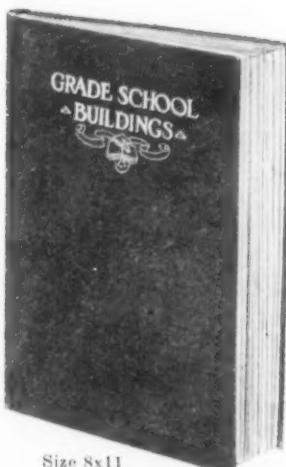
Edited by Wm. C. Bruce

Every floor plan and photograph has been selected because it expresses an idea or a development in schoolhouse construction. Every school board and school architect should have the Library for constant and ready reference.

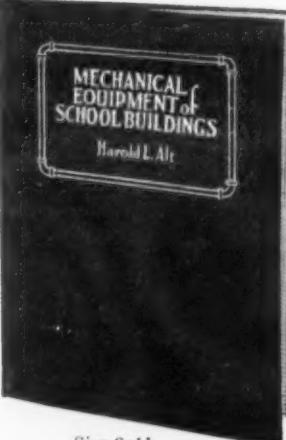
BRUCE'S SCHOOL ARCHITECTURE LIBRARY

sent on approval to any superintendent of schools, school board or accredited school architect. Write us today.

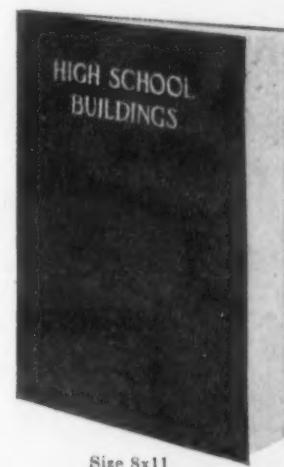
In preparation, School Architecture (Sixth Edition).



Size 8x11



Size 8x11



Size 8x11



Size 6 1/2 x 9 1/2

THE BRUCE PUBLISHING CO.,

206 Montgomery Bldg.

Milwaukee, Wis.



AFTER THE BOARD MEETING

The Rah! Rah! Boys.

BY WALTER G. DOTY.

We jeered at their ways and their lack of lore;
We laughed at the startling clothes they wore;
We called them boisterous, heedless, loud,
And lumped them all as a useless crowd.
We said: "They are not what their fathers were."
And took a pride in the foolish slur;
And then when the test came fair and square
The Rah! Rah! Boys were the first ones there!
Ahead of the flag, on the firing line,
Where the drum fire roars and the great shells
whine;
Out there at the front doing each his bit
In Freedom's cause for the love of it!
We saw but the pipes and the vivid ties,
And the rest was hid to our purblind eyes.
The flame of the battle shows the truth.
How shines the gold of their splendid youth!
The nation arms for the righteous fray,
But the Rah! Rah! Boys have led the way.
To them has the truth gleamed luminous
That a yoke for France were a yoke for us.
We prated of peace as the days went by,
But the Rah! Rah! Boys went forth to die!
Ah, well may the land of their birth rejoice
In the chivalry of its Rah! Rah! Boys!

George Knew.

Supt. Graves was a man of decision and his positive character led to the common report that he "never changed his mind." But even great men have their limitations and there is truth in the old saw that no man is a hero in his wife's eyes.

Mrs. Graves wanted a picture hung to the right of a window in the living room; Supt. Graves wanted it to the left.

Under the superintendent's stern eyes, Old George, the colored man of all work, drove a nail to the left of the door and hung the picture. This done he drove a nail in the wall to the right of the door.

"What is that nail for, George?" demanded Graves.

"It's to save de trouble of fetching de nails and hammer tomorrow," said George, "when you have changed your mind."

Herbert was fond of giving realistic touches to his reading lesson. He had been corrected repeatedly by his teacher for adding words that were not in the book. In a lesson about pigs Herbert read the concluding sentence—"And the little pig said, 'Wee, wee, wee, wee, wee—'"

The teacher interrupted him. "Herbert, read that last sentence again. 'Can't you see that in the book there are only two 'wees'?"

Herbert looked up defiantly. "Teacher," he declared, "there never was a little pig that said 'wee, wee' just twice, and then stopped!"

Teacher—"What does h-u-n-t spell, Elmer?"
Small Elmer—"Dunno."

Teacher—"Don't you know what your father does when he loses his collar button?"

Small Elmer—"Yes, ma'am. He says things—but—but, mother won't let me repeat them."

Pauline at School.

After her third day's attendance at school, Pauline was relating at home stories of her classmates' naughtiness.

"That's bad," commented mamma. "Didn't the teacher have to correct you?"

"No," Pauline assured her. "She had to speak to all the class but me this afternoon."

"That's queer," remarked papa, a bit suspicious. "What did she say?"

"She said," reported Pauline: "Now, children, we will all wait till Pauline is in order!"—Everybody's Magazine.

And He Was An Expert.

An Eastern college professor who holds an important chair in educational psychology, has an uncanny ability to judge the occupation, education and character of people with whom he comes in contact for the first time. He studies people whom he sees in trains and on street cars. His wife believed his judgment infallible until—witness the following incident:

In a branch line train the professor's wife noticed a man of commanding figure, massive head, and refined, serious expression in the seat before them.

"I wonder if he is a lawyer?" said Mrs. Professor.

"No, he hasn't enough combativeness in his character," answered the professor.

"Probably a banker."

"I am sure he is not. A man with such a heavenly expression couldn't content himself with money getting. His aim in life is higher."

"Well, do you think he can be an editor?"

"An editor, with such a face! An editor, saying hard things about everybody, cutting and slashing his enemies, flaying public men indiscriminately and mercilessly slaughtering his best friends for the sake of a paragraph! No, he's a philanthropist. His face plainly indicates that he is all that is good, noble, pure and true."

At the next station, a talkative chap evidently a farmer, took the seat beside the benevolent looking big man and engaged in conversation with him. The professor and his wife listened to the conversation with the guilty feeling of well bred eavesdroppers until the farmer rather bluntly asked what business his neighbor was engaged in. The reply was this:

"I've got a saloon and butcher shop. My wife tends the bar and I do my own killing."

At the Officer's Training Camp.

Teacher: What is the difference between a "rout" and a "retreat"?

Student Officer: A rout is when the enemy is beaten; a retreat is when we are beaten.

Breaking the I-c-e.

When Alice Jones was eighteen she became Miss E. Alysse Jones. When she went to enter a college she was asked her name by the dean. She replied:

"Miss E. Alysse Jones—A-l-y-s-s-e."

"Yes," said the dean; "and how are you spelling 'Jones' now?"



Musical Notes.

First Medical Student—Are you going to that Appendicitis Lecture this afternoon?

Second Medical Student—No, I'm tired of those organ recitals.—Judge.

Culled from Recent Examination Papers.

The Chamois is valuable for its feathers; the whale for its kerosene oil.

The feminine gender of friar is toastress.

There were no Christians among the early Gauls; they were mostly lawyers.

Climate is caused by the emotion of the earth around the sun.

Four animals belonging to the cat family are the father cat, the mother cat and two little kittens.

Geometry teaches us how to bisect angels.

The purpose of the skeleton: Something to hitch meat to. The skeleton is what is left after the insides have been taken out and the outsides have been taken off.

A blizzard is the inside of a hen.

A circle is a round straight line with a hole in the middle.

When Cicero delivered this oration he was a prefix.

George Washington married Martha Curtis, and in due time became the father of his country.

Sixty gallons make one hedgehog.

The stomach is just south of the ribs.

The alimentary canal is located in the northern part of Indiana.

The rosetta stone was a missionary to Turkey.

Georgia was founded by people who had been executed.

A mountain pass is a pass given by the railroads to its employees so that they can spend their vacations in the mountains.

A mountain range is a large cook-stove.

The qualifications of a voter at a school meeting are that he must be the father of a child for eight weeks.

Achilles was dipped in the River Styx to make him immortal.

Gravitation is that if there were none we should fly away.

The stomach forms a part of the Adam's apple.

The first Governor of Mass. was Mr. Salem Witchcraft.

Johnny Made Good.

In instructing a youthful class in mathematics, the pretty young teacher turned to John Jones.

"Johnny," she remarked, "can you tell me what an average is?"

"Yes, ma'am," was the prompt response of Johnny; "an average is what a hen lays eggs on."

"What!" exclaimed the amazed teacher. "What on earth are you talking about?"

"That's right, Miss Mary," was the persistent rejoinder of Johnny. "'Most every lesson in our arithmetic starts off, 'If a hen lays two eggs a day on an average!'"

Making a Distinction.

"What is the difference," asked the teacher, "between caution and cowardice?"

Johnny, who observed things carefully for so youthful a person, answered:

"Caution is when you're afraid and cowardice is when the other fellow's afraid."—Ladies' Home Journal.

Dead!

With rounding lips and an air of great importance the small boy of a Sunday school imparted the happy fact to his teacher.

"The devil's dead," he said, solemnly.

"What makes you think that?" said the startled teacher.

"Dad said so," explained the small boy. "I was standing in the street with him yesterday when a funeral passed, and when dad saw it he said: 'Poor devil, he's dead'."

Too Tender a Subject.

Teacher—Do you know, Johnnie, where shingles were first used?

Johnnie (modestly)—I'd rather not tell.

AD

Oliver C.

L. O. D.

Perennia

Walger

Caxton

Binney

Eagle

America

Devoe

Gillis &

AU

Kansas

AU

Haney C.

Peabody

America

Peter

Steel

Fu

N. J. Sch

Heywood

Empire

Superior

BLACK

Walger A.

BLACK

N. Y. Sil

Beaver B.

Caxton S.

E. W. A.

Weber C.

BLACK

Keenan S.

Penna. S.

Natural S.

Holden P.

Peckham

Gregg P.

D. C. He

Isaac Pit

Silver, B.

American

Newson &

Tina & C

J and Mc

The Cent

G. P. Put

Arthur J.

Macmillan

Houghton

CAFE

Albert Pi

A. J. Nyst

Modern S.

Weber Co.

Central Sc

CHI

Dail Steel

Binney &

American

Peckham

Peter & V

E. W. A.

Weber Co.

DE

Samuel Ca

DESK S

Wayell C

DICT

Union Sc

Ames & R

D

Theo. B. R

Central Ci

DOMEST

E. H. Sheldon

Keweenaw

C. Christian

Leonard Pe

Federal Eq

Albert Pick

D

Norton Do

Sargent & C

DRAFTING

E. H. Sheldon

C. Christian

DRAY

Frederick P

DRIN

L. Wolff M

N. O. Nelson

Rundie-Spe

Glauber Br

20th Centur

If any

Educational Trade Directory

The names given below are those of the leading and most reliable Producers of School Goods in the United States. Under our guarantee none other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly by ordering from these firms or their jobbers.

| | | | | |
|---|---|---|---|---|
| ADJUSTABLE WINDOW SHADES Oliver C. Steele Mfg. Co. L. O. Draper Shade Co. Perennial Shade Co. Walger Awning Co. Caxton School Supply Co. | ENAMEL The O'Brien Varnish Co. | LIBRARY SHELVING Durand Steel Locker Co. | SEWAGE DISPOSAL Waterman-Waterbury Co. | TYPEWRITERS Underwood Typewriter Co. |
| ART MATERIALS Binney & Smith Eagle Pencil Co. American Crayon Co. Devoe & Raynolds | ENGRAVINGS Premier Eng. Co. | LIGHTING FIXTURES Luminous Unit Co. Holophane Glass Co. | SHADE CLOTH Stewart Hartshorn Co. Walger Awning Co. | VACUUM CLEANING SYSTEMS Spencer Turbine Cleaner Co. |
| ASH HOISTS Gillis & Geoghegan | ERASERS Associated Mfgs. Co. Caxton School Supply Co. Weber Costello Co. | LIQUID FLOOR HARDENER L. Sonneborn Sons Franklyn R. Muller & Co. | SHADE ROLLERS Stewart Hartshorn Co. Walger Awning Co. | VARNISH Keystone Varnish Co. O'Brien Varnish Co. |
| AUDITORIUM SCENERY Kansas City Scenic Co. | EXIT DEVICES Vonnegut Hardware Co. | LIQUID SLATING N. Y. Silicate Book Slate Co. | STAGE EQUIPMENT Kansas City Scenic Co. | VENTILATORS Peerless Unit Vent. Co. |
| AUDITORIUM SEATING Haney School Furniture Co. Peabody School Furniture Co. American Seating Co. Peter & Volz Co. Steel Furniture Co. N. J. School & Church Furn. Co. Heywood Bros. & Wakefield Co. Empire Seating Co. Superior Seating Co. | FILING CABINETS Yawman & Erbe Mfg. Co. | LIQUID SOAP Associated Mfgs. Co. | STEEL WINDOW SASH Winslow Bros. Co. | WAGONS The Wayne Works Studebaker Corporation |
| BLACKBOARDS — COMPOSITION N. Y. Silicate Book Slate Co. Beaver Board Companies Caxton School Supply Co. E. W. A. Rowles Co. Weber Costello Co. | FIRE ALARM SYSTEMS Holtzer-Cabot Electric Co. Stand. Electric Time Co. | LOCKERS Federal Steel Fixture Co. Fred Medart Mfg. Co. Berger Mfg. Co. Durand Steel Locker Co. | SWEEEPING COMPOUNDS Theo. B. Robertson Products Co | WAGON HEATERS Miller Vehicle Heater Co. |
| BLACKBOARDS — NATURAL SLATE Keenan Structural Slate Co. Penn. Struct. Slate Co. Natural Slate Blackboard Co. | FIRE ESCAPES Minnesota Manufacturers Assn. | MACHINERY Oliver Machinery Co. Amer. Wood Work. Mach. Co. | TABLE TOPS The Vitrolite Co. | WALL DEAFENING Samuel Cabot |
| BOOK COVERS Holden Patent Book Cover Co. Peckham, Little & Co. | FIRE EXIT LATCHES Vonnegut Hdw. Co. Sargent & Co. | MANUAL TRAINING EQUIPMENT E. H. Sheldon & Co. | TALKING MACHINES Victor Talking Machine Co. | WALL PAINTS Keystone Varnish Co. |
| BOOK PUBLISHERS Gregg Publishing Company D. C. Heath & Co. Isaac Pitman & Sons Silver, Burdett & Co. American Book Co. Newson & Co. C. & C. Co. J. and McNally Co. The Century Co. G. P. Putnam's Sons Arthur J. Barnes Pub. Co. Macmillan Company Houghton Mifflin Co. | FLAGS The Chicago Flag & Decorat. Co. Annin & Co. H. Channon Co. | MAPS Rand McNally & Co. Modern School Supply Co. A. J. Nystrom & Co. Weber Costello Co. | TEMPERATURE REGULATION Johnson Service Co. | WASTE PAPER BASKETS American Vulcanized Fibre Co. |
| CAFETERIA EQUIPMENT Albert Pick & Co. | FLOORING Franklyn R. Muller & Co. | FLOOR BRUSHES Milwaukee Dustless Brush Co. | TILE SLABS Ludowici-Celadon Co. | WATER COOLERS Waterman-Waterbury Co. |
| CHARTS A. J. Nystrom & Co. Modern School Supply Co. Weber Costello Co. | FLOOR DEAFENING Samuel Cabot | FLOOR SURFACING MACHINE Wayvell Chappell & Co. | TOILET PAPER A. P. W. Paper Co. | WEATHER STRIP American Metal Weather Strip Co. |
| CHEMICALS Central Scientific Co. | FOLDING PARTITIONS Jas. G. Wilson Corp. | FORGES Oliver Machinery Co. | TOILET PARTITIONS The Vitrolite Co. | WINDOWS — ADJUSTABLE Austral Window Co. |
| CHEMICAL CLOSETS Dail Steel Products Co. | FUMIGATORS Central City Chemical Co. | FURNACES Haynes-Langenberg Mfg. Co. | TOILET ROOM FIXTURES A. P. W. Paper Co. | WIRE WINDOW GUARDS L. O. Draper Shade Co. |
| CRAYONS Binney & Smith American Crayon Co. Peckham, Little & Co. Peter & Volz E. W. A. Rowles Co. Weber Costello Co. | FURNITURE American Seating Co. Peabody School Furniture Co. Haney School Furniture Co. Peter & Volz Co. Steel Furniture Co. N. J. School & Church Furn. Co. Heywood Bros. & Wakefield Co. Columbia School Supply Co. Empire Seating Co. E. H. Stafford Mfg. Co. Quaint Art Furniture Co. Educational Equip. Co. H. Channon Co. N. Snellenburg & Co. E. W. A. Rowles Co. Superior Seating Co. Thomas Charles Co. Union School Furniture Co. | GAS MACHINES Detroit Heat & Light Co. | PAPER TOWELS Diamond Ink Co. | WOODWORKING MACHINERY Oliver Machinery Co. |
| DEAFENING QUILT Samuel Cabot | GLOBES Rand McNally & Co. Modern School Supply Co. A. J. Nystrom & Co. Weber Costello Co. | GLOBES Rand McNally & Co. Modern School Supply Co. N. O. Nelson Mfg. Co. 20th Century Brass Works | PENCIL MANUFACTURERS Eagle Pencil Co. | TYPE American Type Founders Co. |
| DESK SURFACING MACHINE Wayvell Chappell & Co. | GLUE Diamond Ink Co. | GRAPHOPHONES Columbia Graphophone Co. | PEN MANUFACTURERS Automatic Pencil Sharpener Co. | |
| DICTIONARY STANDS Union School Furniture Co. | GYMNASIUM APPARATUS Fred Medart Mfg. Co. | INKS Diamond Ink Co. | PENCIL SHARPENERS Automatic Pencil Sharpener Co. | |
| DIPLOMAS Ames & Rollinson | HEATERS Haynes-Langenberg Mfg. Co. Virginia School Supply Co. Waterman-Waterbury Co. | INK DRY E. W. A. Rowles Co. | PLAYGROUND APPARATUS Fred Medart Mfg. Co. Hill-Standard Co. | |
| DISINFECTANTS Theo. B. Robertson Products Co. Central City Chemical Co. | INK WELLS The Tannewitz Works American Seating Co. Squires Inkwell Co. Sengbusch Self-Closing Inkstand Co. | INKS Diamond Ink Co. | PLUMBING FIXTURES L. Wolff Mfg. Co. Rundle-Spence Mfg. Co. N. O. Nelson Mfg. Co. 20th Century Brass Works | |
| DOMESTIC SCIENCE EQUIPMENT E. H. Sheldon & Co. Kewaunee Mfg. Co. C. Christiansen Leonard Peterson & Co. Federal Equipment Co. Albert Pick & Co. | INSECT POWDER Hammond Paint & Slug Shot Works | INK DRY E. W. A. Rowles Co. | PORTABLE SCHOOLHOUSES Mershon & Morley American Portable House Co. The Armstrong Co. Louis Bossert & Sons | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | JANITORS' SUPPLIES Theo. B. Robertson Products Co. Milwaukee Dustless Brush Co. | INK WELLS The Tannewitz Works American Seating Co. Squires Inkwell Co. Sengbusch Self-Closing Inkstand Co. | PRINTERS' SUPPLIES American Type Founders Co. Golding Mfg. Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY FURNITURE Kewaunee Mfg. Co. Leonard Peterson & Co. Columbia School Supply Co. Federal Equipment Co. E. H. Sheldon & Co. | INK DRY E. W. A. Rowles Co. | PROGRAM CLOCKS Standard Electric Time Co. Landis Eng. & Mfg. Co. Seth Thomas Clock Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | INK WELLS The Tannewitz Works American Seating Co. Squires Inkwell Co. Sengbusch Self-Closing Inkstand Co. | PROJECTION LANTERNS AND ACCESSORIES Bausch & Lomb Opt. Co. McIntosh Stereop. Co. Enterprise Optical Mfg. Co. Victor Animatograph Co. De Vry Corporation The Pathescope Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | INK WELLS The Tannewitz Works American Seating Co. Squires Inkwell Co. Sengbusch Self-Closing Inkstand Co. | RECORD SYSTEMS C. F. Williams & Son, Inc. Shaw-Walker Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | INK WELLS The Tannewitz Works American Seating Co. Squires Inkwell Co. Sengbusch Self-Closing Inkstand Co. | REINFORCED STEEL Berger Mfg. Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | ROOFING TILES Ludowici-Celadon Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SCHOOLROOM HEATERS International Heater Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF MOISTENING BRUSHES Milwaukee Dustless Brush Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRINKING FOUNTAINS L. Wolff Mfg. Co. N. O. Nelson Mfg. Co. Rundle-Spence Mfg. Co. Glauber Brass Mfg. Co. 20th Century Brass Works | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DOOR CHECKS Norton Door Check Co. Sargent & Co. | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAFTING ROOM FURNITURE E. H. Sheldon & Co. C. Christiansen | LABORATORY SUPPLIES Central Scientific Co. | LABORATORY SUPPLIES Central Scientific Co. | SELF-RELEASING FIRE EXIT DEVICES Vonnegut Hardware Co. | |
| DRAWING MATERIAL Frederick Post | | | | |

"STRAWS SHOW WHICH WAY THE WIND BLOWS"

The success of the recent daylight saving plan is but an indication of how Americans are waking up to the vital importance of conserving time and utilizing it to the best possible advantage.

In the long run however it is the efficient planning by time and the thorough use of time throughout the day that moves the Nation forward with the greatest stride.

The foundation of all this efficient planning and work must be Time's measuring device—the clock.

In the schoolhouse uniformity of time, reliability and convenience are the essential needs as regards a time and program system.

"Standard" Electric Time Equipment meets these requirements thoroughly. It is the one big indispensable help to the principal, teachers, pupils, and janitor, every minute of the day.

Thousands of schools throughout the United States and Canada enjoy the advantages of "Standard" Equipment. **WHY DOESN'T YOURS?** Under present conditions you cannot afford to let your school struggle along under an antiquated time system handicap.

Procrastination alone stands in the way. The only way to stop procrastination is to act while the suggestion is in your mind. Write today to Home Office or Nearest Branch for further particulars, and call your Committee's attention to the importance of the matter.

THE STANDARD ELECTRIC TIME COMPANY

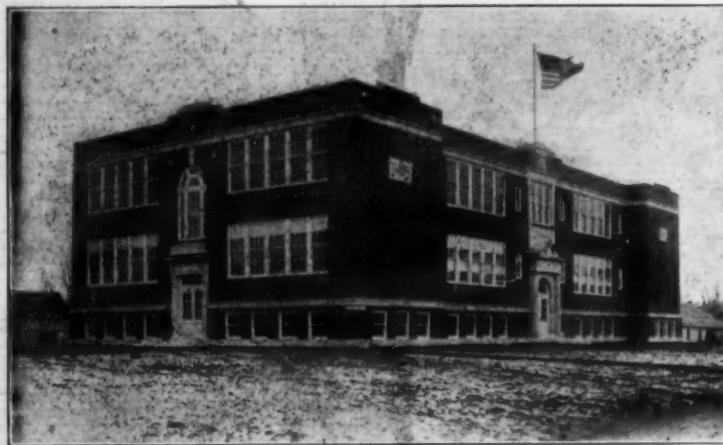
Springfield, Mass.

BRANCHES: 50 Church Street
NEW YORK
Monadnock Bldg.
CHICAGO

261 Franklin Street
BOSTON
Marsh-Strong bldg.
LOS ANGELES

Rockefeller Building
CLEVELAND
461 Market Street
SAN FRANCISCO

Brown-Marx Building
BIRMINGHAM, ALA.
1513-A Grand Ave.
KANSAS CITY



GLENS FALLS SCHOOL, GLENS FALLS, N. Y.
Tooker & Marsh, Architects.

83 Sets 2B Austral Hardware to
Equip the Windows of this Building

LIGHT AND AIR

Gentlemen:

The AUSTRAL Windows furnished by you and as specified by Tooker & Marsh, Architects, for the new school building built for the City of Glens Falls, have given great satisfaction both as to light and ventilation.

Yours truly,
FRED G. FIELDING,
Pres. Board of Education.

Write for New School Catalogue

AUSTRAL WINDOW COMPANY
101 Park Avenue

NEW YORK



FREEPORT SCHOOL, FREEPORT, L. I.
Chas. M. Hart, Architect, Bay Shore, N. Y.

Deadened with Cabot's Quilt

SOUND PROOF FLOORS AND PARTITIONS

are necessary in all safe and sane schoolhouses, and are produced by

Cabot's Deafening "Quilt"

It breaks up and absorbs the sound waves as no other deadener can; it is indestructible, uninflammable, scientific and sanitary; cannot rot, will not harbor moths or vermin, and resists fire.

"I have found the Quilt invaluable as a deadener of noise."—RUDYARD KIPLING.

Sample and special brochure on schoolhouse deafening, illustrated, sent on request.

SAMUEL CABOT, Inc., Sole Mnfrs., Boston, Mass. U.S.A.
1133 Broadway, N. Y. 24 W. Kinzie St., Chicago

Beware of unsanitary imitations.